

For Reference
Do Not Take
From the Library

Every person who maliciously cuts, defaces, breaks or injures any book, map, chart, picture, engraving, statue, coin, model, apparatus, or other work of literature, art, mechanics or object of curiosity, deposited in any public library, gallery, museum or collection is guilty of a misdemeanor.

**Penal Code of California
1915, Section 623**



Digitized by the Internet Archive
in 2014

<https://archive.org/details/businessweek199203newy>

ESS WEEK
May 4

BURLINGAME PUBLIC LIBRARY
3 9042 03330368 3

BusinessWeek

4, 1992

A MCGRAW-HILL PUBLICATION

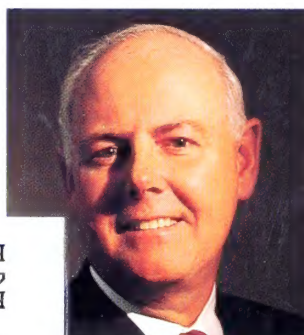
\$2.75

Johnson & Johnson A BIG COMPANY THAT WORKS!

BURLINGAME
APR 24 1992
LIBRARY ✓

J&J's secret is keeping its businesses divided into small pieces. Managers are given a free rein to take big risks and to play hardball in competitive markets. But they better produce.

PAGE 124



RALPH LARSEN

*****5-DIGIT 94010
0602 105811160 DEC92 103 2510
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA 94010-40

If making all your computers and applications work together were as simple as hooking up another device or introducing a new technology, you would have done it by now.

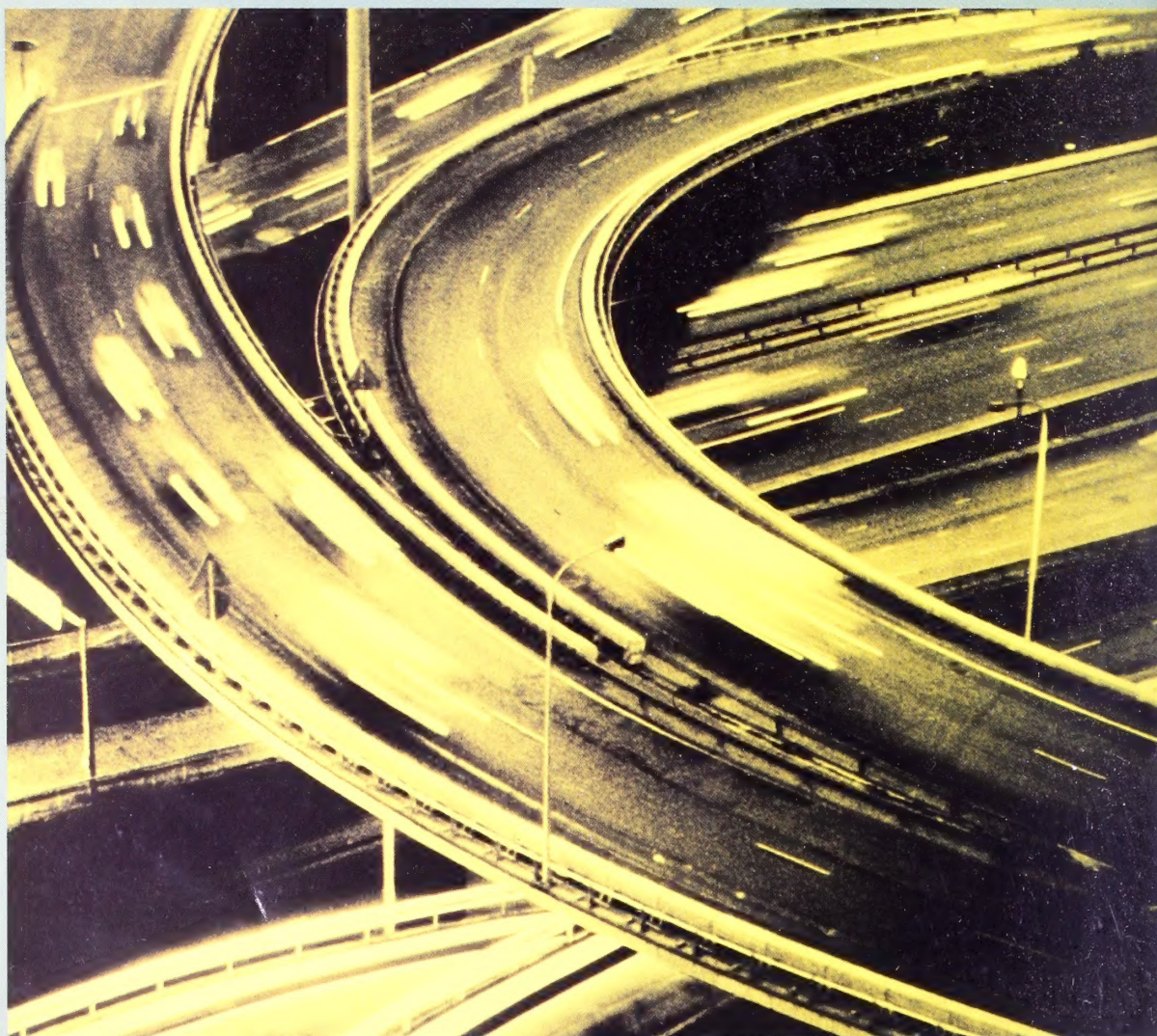
But true systems integration isn't that simple. Because it takes more than technology to make it happen. It takes people as well.

People who understand your business. People who understand how integrating a multi-vendor solution can affect your business. People who can advise you, consult with you, even train your users on multiple vendors' systems.

Digital has such people. Over 40,000 of them, actually. A global support and

service group capable of solving all your systems integration problems.

Which means no matter how large your company or how small your work group, we can do everything from manage your multi-vendor solution to provide a single point of contact through every stage of a system's



N A S F R O M D I G I T A

© DIGITAL EQUIPMENT CORPORATION 1991. THE DIGITAL LOGO IS A TRADEMARK OF DIGITAL EQUIPMENT CORPORATION.

DIGITAL OPENS THE WAY TO SYSTEMS INTEGRATION.

egration program.

We've been doing so for more than a decade. Supporting multi-vendor networked solutions for hundreds of companies all over the world, while integrating over 8000 hardware and software products from more than 800 different vendors.

Concurrently, we've taken a leadership role in all the major standards bodies

and consortia, helping to develop such widely accepted standards as Motif®, OSF®/DCE, X.400, IEEE/POSIX, OSI and scores of others. One result of which is our Network Application Support (NAS), which can help you build open, multi-vendor networks with true application interoperability across different platforms and operating environments.

Another result is the new and widely heralded Advanced Computing Environment (ACE) initiative. Destined to solve the software compatibility problems between RISC and x.86 products.

All of which means if you've got the will, Digital has the way to integrate all of your systems. To find out more, talk to a Digital **digital**™ representative.

THE OPEN ADVANTAGE.

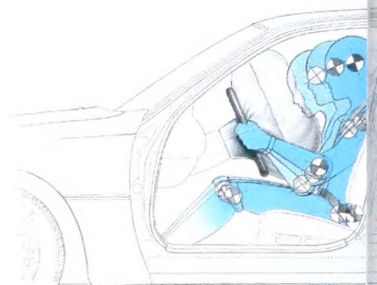
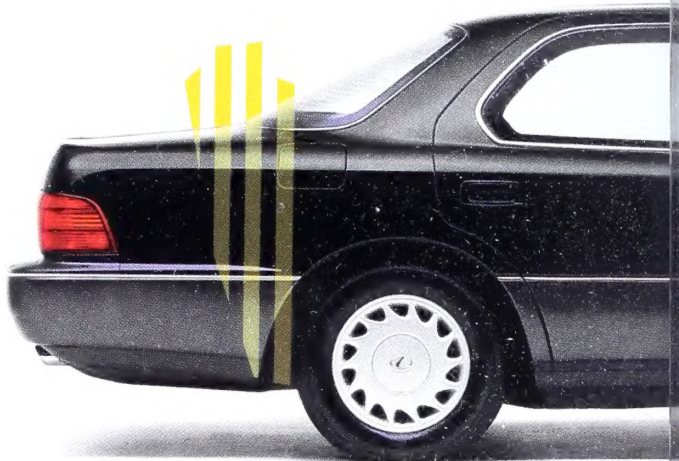
MOTIF AND OSF ARE REGISTERED TRADEMARKS OF THE OPEN SOFTWARE FOUNDATION.

Does Your Car Fa

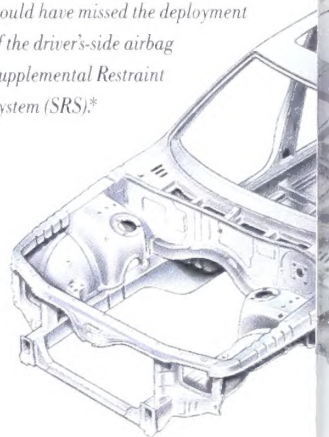
Just before metal meets metal, a car has a host of systems that allow you to take evasive action. The engine, the brakes, the steering—all are at your disposal to help you get out of trouble.

Unfortunately, trouble is not always avoidable. And at the instant of impact and for the next fraction of a second, a number of other systems in your car are there to help defend you.

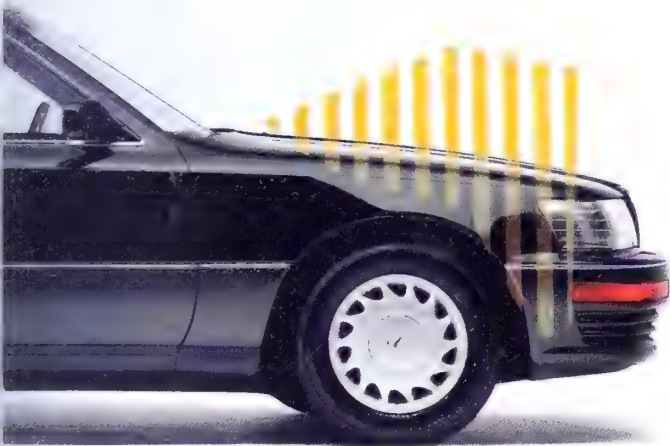
That is why, in the event of a severe frontal collision (the most common type of accident), the LS400 is carefully orchestrated to self-destruct. The energy from the crash is chan-



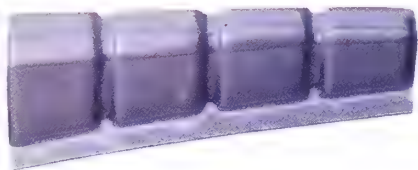
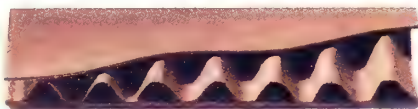
*If you blinked while reading this, you would have missed the deployment of the driver's-side airbag Supplemental Restraint System (SRS).**



Apart This Well?



Similar to the way a segmented cardboard box cushions its contents, the front chassis sections are designed to create crumple zones that progressively give upon impact.



A door can act as a barrier as well as an entryway. Each door is fortified with a steel side-intrusion beam.



Every part of the monocoque body is designed to give; the passenger cabin is made with high-tensile-strength steel.



nelled through what is known as the "crumple zone," which manages much of the impact in order to help protect the driver and passengers.

Indeed, that is the point of all our safety features: to help reduce the risk of injury to you and yours. It is a goal that is impossible for anyone to ever guarantee. But it is a goal to which we are nevertheless committed. So if you are impressed by how well a Lexus is put together, let us assure you of one thing: it falls apart rather impressively, too.

LEXUS
The Relentless Pursuit Of Perfection.



THE MAESTRO OF J&J: CEO RALPH LARSEN ORCHESTRATES A DIZZYING ARRAY OF UNITS, WHILE GIVING EACH ABUNDANT CREATIVE FREEDOM

Cover Story

124 A BIG COMPANY THAT WORKS

At Johnson & Johnson, 'empowerment' is more than a management buzzword. The maker of everything from Band-Aids to birth-control drugs has pushed the idea of decentralization for over 50 years. Now—even as CEO Ralph Larsen fine-tunes the concept—J&J's small, self-governing units are models for big companies such as IBM, PepsiCo, and Du Pont. Oh, yes: Its units are model profitmakers, too

132 THE FORESIGHT SAGA

How J&J carved a niche in disposable contact lenses

Top of the News

30 DEC: SO MANY PROBLEMS

Sales are off, costs are high—and critics say the company is rudderless

33 ALPHA BET

DEC wagers all on a new design

34 A CRAY 3 COULDN'T SOLVE THIS

Cray Computer has no orders, no product—and now, no CEO

35 BATTLE OVER BIODEGRADABLES

Battelle says Du Pont misused their joint research on plastics

36 AFTER CAT

Two views on a bill banning companies from hiring replacements

37 STAR-CROSSED AT ORION

Creditors reject a buyout plan, and the studio is back at square one

38 APRIL SURPRISE

Contrary to predictions, the profits reported so far are decidedly upbeat

40 YOU GOTTA HAVE A GIMMICK

This year's annual reports are eclectic. Some even go for candor

42 COMMENTARY

This design-protection bill needs remodeling

44 IN BUSINESS THIS WEEK

U. S. airfare wars, Air France's grievances, College Bound, execs on the run, GE, cellular refinements

International Business

50 LATIN AMERICA

New, giant free-trade bloc Mer...

52 VIETNAM

Back to Hanoi, with briefcases

53 ITALY

De Benedetti's trial by fire

55 INTERNATIONAL OUTLOOK

The republics: How much is en...

Economic Analysis

19 ECONOMIC VIEWPOINT

Blinder: Congress' real problem

22 ECONOMIC TRENDS

Free trade, lending and recovery, defense cuts, consumer spending

27 BUSINESS OUTLOOK

Jobs: The missing piece of the p...

Government

49 WASHINGTON OUTLOOK

Lobbyists will miss familiar fac...

62 INSURER VS. INSURER

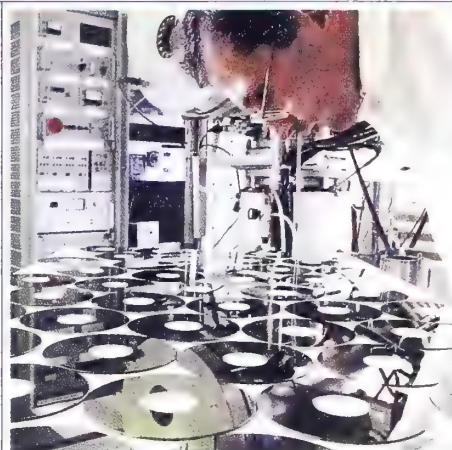
They're split over health care r...



CRUNCH TIME AT DEC:
AMERICA'S NO. 2 COMPUTER
COMPANY JUST WENT THROUGH 'THE
QUARTER FROM HELL.' WILL ITS
RISC MACHINES SAVE THE DAY?



142 HAPPY PAYDAYS:
SEVERAL MANAGERS PULLED IN OVER
\$20 MILLION LAST YEAR—INCLUDING
TURI JOSEFSEN, THE HIGHEST-PAID
FEMALE EXECUTIVE EVER



68 'THE GOVERNMENT HAS NO MONEY':
SCIENTISTS AT MOSCOW'S
KURCHATOV INSTITUTE AND
ELSEWHERE ARE HAWKING THEIR
SERVICES TO THE WEST—CHEAP

People

A SIXTH SENSE FOR STOCKS
Heiko Thieme's American Heritage
had a 97% return in '91

The Workplace

LOSING THAT TEAM SPIRIT
A legal case is brewing against
worker-manager partnerships

Science & Technology

FOR SALE: SOVIET TECHNOLOGY
Now, the U. S. stands to gain a
competitive edge

ARMS BIZARRE
Russian missiles—as clay pigeons

DEVELOPMENTS TO WATCH
Plastic from plants, diabetes gene,
degradable products, octane
adjuster, four-wheel fuzzy logic

Information Processing

EXPLOITING TELECOM'S TANGLES
Ron Haan keeps coming up roses

Legal Affairs

DID JONES DAY DO ITS DUTY?
The feds are suing Lincoln's lawyers

Sports Business

I GOT THE HORSE RIGHT HERE
This year's Kentucky Derby is
bringing fresh faces to the owners'
boxes, including rap star Hammer

Industries

140 AMERICAN SONIC BOOM
U. S. stereo makers dominate the
pricey high-end market

Special Report

142 WHAT, ME OVERPAID?
BW's executive pay survey finds
many CEOs defending their lavish
packages against an angry public

144 WHO'S WORTH IT, WHO'S NOT
Executive pay vs. performance

146 CEO BACK SCRATCHERS
Comp committees cozy with the boss



178 BABY BOOMERS' TRIPLE WHAMMY:
NOW 27 TO 46, THEY NEED
STRATEGIES TO PROVIDE FOR
CHILDREN'S TUITION, AGING PARENTS'
CARE, AND THEIR OWN RETIREMENT

Finance

164 WINNING WITH LOSERS
Loans to Chapter 11 companies pay

165 ACQUIRING THE ACQUIRER
Integrated Resources is on the block

168 FUNNY MONEY—BUT NO LAUGHS
Lawsuits over an S&L fiscal gambit

170 INSIDE WALL STREET
Will Sprint be chased by a suitor?
NTN: Two-way TV hits prime time
Oxford is one healthy HMO

185 INVESTMENT FIGURES OF THE WEEK

Marketing

175 ADS INFINITUM
Infomercials court respectability

Personal Business

178 THE SANDWICH GENERATION
How to send the kids to college,
provide for elder care, and see to
your own needs? It's never easy, but
there are some useful strategies

Features

6 BUSINESS WEEK INDEX

7 READERS REPORT

14 BOOKS

68 LETTER FROM SHANGHAI

183 INDEX TO COMPANIES

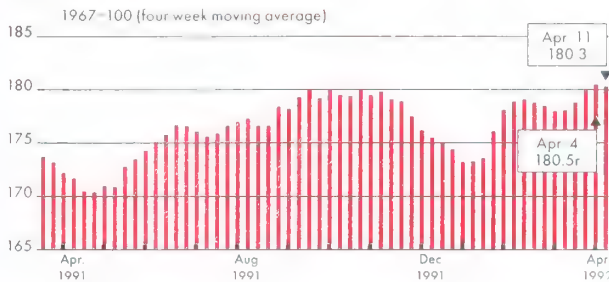
186 EDITORIALS

CEO pay: Coke's wrong message
Strike a balance when workers strike
The high road in South Africa

BusinessWeek Index

PRODUCTION

Change from last week: -0.1%
Change from last year: 5.0%

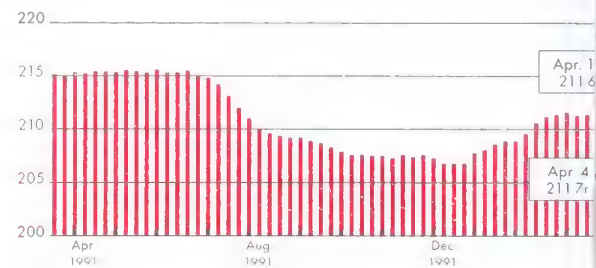


The production index was little changed in the week ended Apr. 11. On a seasonally adjusted basis, output of autos, coal, lumber, and rail-freight traffic all increased in the latest week. Production of steel, trucks, electric power, and crude-oil refining was down, while paper and paperboard output levels were flat. Before calculation of the four-week moving average, the index slipped to 179, from 179.3 in the previous week.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: -1.7%



The leading index was unchanged during the week ended Apr. 11, as the of the separate components showed little movement. Slightly lower stock prices, deteriorating growth rates for materials prices and M2 offset a decline in number of business failures, lower bond yields, and improvement in real estate loans. Before calculation of the four-week moving average, the index dropped to 211.7 from 212.2 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/18) thous. of net tons	1,810	1,805#	12.1
AUTOS (4/18) units	104,971	119,302r#	-2.0
TRUCKS (4/18) units	72,677	83,655r#	8.7
ELECTRIC POWER (4/18) millions of kilowatt-hours	51,328	50,871#	0.4
CRUDE-OIL REFINING (4/18) thous. of bbl./day	13,248	13,293#	2.0
COAL (4/11) thous. of net tons	18,626#	17,382	-2.2
PAPERBOARD (4/11) thous. of tons	813.6#	815.9r	10.3
PAPER (4/11) thous. of tons	761.0#	772.0r	1.1
LUMBER (4/11) millions of ft	504.3#	503.2	1.3
RAIL FREIGHT (4/11) billions of ton-miles	20.6#	19.9	8.4

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/22)	134	133	138
GERMAN MARK (4/22)	1.66	1.65	1.75
BRITISH POUND (4/22)	1.76	1.76	1.69
FRENCH FRANC (4/22)	5.62	5.59	5.90
CANADIAN DOLLAR (4/22)	1.18	1.18	1.15
SWISS FRANC (4/22)	1.54	1.52	1.47
MEXICAN PESO (4/22)	3,047	3,047	2,992

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/22) \$/troy oz	338.100	338.950	-4.9
STEEL SCRAP (4/21) #1 heavy, \$/ton	92.00	94.00	-8.5
FOODSTUFFS (4/20) index, 1967=100	201.4	200.6	-2.9
COPPER (4/18) c/lb.	103.6	105.9	-9.1
ALUMINUM (4/18) c/lb.	62.4	62.0	-3.4
WHEAT (4/18) #2 hard, \$/bu	4.08	4.14	37.4
COTTON (4/18) strict low middling 1-1/16 in., c/lb.	53.39	55.09	-33.5

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau's Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/17) S&P 500	412.70	400.62r	6.0
CORPORATE BOND YIELD, Aaa (4/17)	8.29%	8.32%	5.0
INDUSTRIAL MATERIALS PRICES (4/17)	97.5	97.2	2.0
BUSINESS FAILURES (4/10)	444	453	8.0
REAL ESTATE LOANS (4/8) billions	\$401.8	\$401.3r	2.0
MONEY SUPPLY, M2 (4/6) billions	\$3,442.9	\$3,458.5r	1.0
INITIAL CLAIMS, UNEMPLOYMENT (4/4) thous	415	433r	8.0

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
HOUSING STARTS (Mar.) annual rate, thous.	1,365	1,283r	6.0
BUDGET SURPLUS OR DEFICIT (-) (Mar.) millions	-\$49,362	-\$48,761r	1.0
IMPORTS (Feb.) millions	\$41,198	\$41,355	2.0
EXPORTS (Feb.) millions	\$37,815	\$35,406	6.0

Sources: Commerce Dept., Treasury Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/6)	\$940.7	\$935.4r	0.5
BANKS' BUSINESS LOANS (4/8)	287.4	289.9r	0.8
FREE RESERVES (4/15)	1,030	1,500r	3.0
NONFINANCIAL COMMERCIAL PAPER (4/8)	140.4	139.0r	1.0

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (4/21)	3.83%	3.68%	4.0
PRIME (4/22)	6.50	6.50	0.0
COMMERCIAL PAPER 3-MONTH (4/21)	3.98	3.95	0.0
CERTIFICATES OF DEPOSIT 3-MONTH (4/22)	3.96	3.93	0.0
EURODOLLAR 3-MONTH (4/18)	4.00	4.10	0.4

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment, 1 = Western Wood Products Assn. 2 = Southern Forest Products Assn. 3 = Free market value NA = Not available r = revised NM = Not meaningful




CORUM® Symbiose Watch Circle and
 rectangle come together in harmonious forms
 of solid 18 karat rose and yellow gold
 Meticulously Swiss-crafted
 Self winding mechanical movement



TOURNEAU®
 NEW YORK

NEW YORK: 212.692.1234
 FLORIDA: 407.596.1234
 LOS ANGELES: 213.692.1234
 MIAMI: 305.596.1234
 PARIS: 1.69.21.23.45

NO LONGER COMMUNISM, NOT QUITE CAPITALISM

It's an hour before the close of trading at the Patriotic Construction Stock Brokerage, and the clientele is, well, just sort of standing around. Why? Demand is so overwhelming for shares since the Shanghai exchange reopened last fall for the first time since 1949 that nobody wants to sell.

"I'm anxious to invest," says Wu Jian, who has made the brokerage his after-work hangout. "The problem is supply." So the 43-year-old machinist and his pals stand riveted to a lethargic computer monitor. Only 11 companies are listed. The wait can be long, but worth it. Last December, Wu's friends pooled \$50,000 to buy shares in one stock and made \$13,000 in a month.

Shanghai is finally rejoining the world economy. The Bund, the old financial district that fronts the Huangpu River, is getting a facelift. Shopping districts have roared back to life. The Cathay Hotel, now the Peace, swings again, to live Dixieland.

As a first-time visitor, I found it easy to get caught up in the talk of renaissance. But after a week it's clear the return of capitalism is proceeding much more cautiously in Shanghai than it is elsewhere in China. For a city that knows the extremes of both capitalism and communism, that's not surprising. In 1854, at the close of the Opium Wars, the British, French, and Americans divvied up Shanghai. By the 1930s, businessmen paid warlords and underworld gangs to keep unions and Communists at bay. Opium and prostitution were rife, and most Chinese lived in squalor. If God let Shanghai stand, went the saying, then He owed an apology to Sodom and Gomorrah.

HIGH HOPES. When the Communists took power, they expelled foreigners, stripped merchants of assets, and subjected their families to decades of terror. The commercial district, with its Gothic spires, cupolas, clock towers, and columns, became a mausoleum of capitalism.

Over the next decade, the government plans to spend \$10 billion in a bid to restore the metropolis of 12 million as a major Asian hub. Party conservatives know that only reform will keep the economy moving. But they are aghast at how "bourgeois liberalism" has run amok in southern China, now in sync with Hong Kong's money culture and flouting Beijing's central planners. In Shanghai, the party is desperately trying to keep the genie halfway in the bottle. So the system is no longer communism, but it's not quite capitalism. I feel I'm touring Ideological Purgatory.

You get an inkling of what I mean at the old Shanghai Club, once the ornate

indifferent officials. Some U.S. companies wait up to eight months to get a three-year license renewed for a representative office. Over breakfast, a ney Norman Givant, about the 1 dour American Chamber of Commerce president I've met in Asia, actually slams his fist at all the wasted time.

A maddening example was the charity walk scheduled last May. "Thirty chops," one organizer groans. "Thirty one chops." After they were secured, 4,000 corporate volunteers signed up for the march. To feed them, 2,000 hot dogs were prepared. But on the evening before the event, a security official expected it was a plot to spark a protest rally. The march was canceled. **SNEAKER ENVY.** The party is trying to entice foreigners across the Huangpu River to Pudong rather than let them retake the Bund. But right now, Pudong isn't much. From our taxi, my guide points to ramshackle housing where the financial district will be and to rice paddies where industrial parks will

Foreigners will live in self-contained communities, complete with schools and courses. So far, Pudong has lured only \$200 million of the \$4 billion hoped for to raise over \$1 billion for infrastructure.

Later that night, I join up with two college students, Wang and Zhang. Wang is especially smitten with the cheap Converse knock-offs from South Korea. His new Nikes cost "only" \$60—about a month's pay for a Chinese. They're made in China, he explains, and that makes them less fashionable. As we stroll the Bund, I tell Zhang



SHANGHAI BEAUTY SALON: SHOPPING DISTRICTS ARE ROARING BACK TO LIFE

retreat of the British upper crust. Now, it's the government-run Dongfeng Hotel. As I'm about to enter, a man sidles up. "Chinese woman, very beautiful." I move on. "Change money? Change money?" someone hisses from a corner. Up the marble staircase, there's a disco and karaoke bar. In place of the once-famed Long Bar is a Kentucky Fried Chicken, complete with a life-size plastic Colonel Sanders. If a British steward awakened from a 50-year sleep, I imagine he would be outraged not so much that the club has gone Chinese—in itself unthinkable—but at the tackiness.

Then there's the bureaucracy. The most routine matters require dozens of "chops," or stamps of approval, from

at least Shanghai can be proud of its architecture. "Those buildings?" he says in disbelief. "They're old." He points to a new skyscraper, a drab rectangle of mirrored glass. "We need more of those."

About the only folks I met in Shanghai who seem to know exactly what they want are Wu Jian and his pals. "Don't expect to get rich investing in stocks," he asks. "Of course," he answers, laughing at the absurd question. Three weeks later I left Shanghai, the exchange had announced five new listings. Thousands of investors jammed brokerages. Wu, expect, was near the front of the line.

PETE ENGEL

Engel is BUSINESS WEEK's Hong Kong correspondent.

YOU'RE THE
BOSS.
YOU TELL THEM
WHERE TO GO.

B E R M U D A

Tear this out. And pass it to your trusted meetings planner. Because holding a meeting on our island gives you the same tax benefits as if you held it in the U.S. Hotels cost about the same. And we're less than two hours from the East Coast.

What's more, our inspiring scenery is certain to inspire great thinking.
Have your planner call Dianne Carlson at 800-223-6106 Ext. 213 for all the rosy details.

Take a chair that pays for itself

ERGONOMICS = PRODUCTIVITY

**Back
Buddy**

 **Nightingale**
A SINGLE MISSION: PRODUCTIVE SEATING

The most expensive chair in your office is the empty chair for the absent employee. Independent studies have shown back pain to be second only to the common cold as a cause of work loss. Studies indicate the economic impact is between 11 and 16 billion dollars annually in the U.S.* Nightingale makes ergonomically-effective seating solutions, like the BACK BUDDY™.

We believe this chair will boost productivity by reducing absenteeism due to back problems.

*For more information, Call 1-800-363-8954

MANAGING EDITOR: Stephen B. Shepard
EDITOR: John A. Dierdorff
ECONOMIST: William Wolman
MANAGING EDITORS:
 J. Dowling, Mark Morrison, G. David Wallace
EDITOR: Malcolm Frouman
EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, H. Dobzynski, Marc Frons, Geoff Lewis, Ciro Scotti, N. Vámos, Lee Walczak (Washington), Chris Welles, Jr. Zucker
EDITORIAL PAGE EDITOR: John E. Pluennicke
EDITORIAL CORRESPONDENTS: Keith G. Felcyn
EDITORIAL EDITOR: William J. Holstein (Editor), Elizabeth (Sr. Editor)
WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis (Jr.), William Glasgall, Gene G. Marcial, Bruce Nussbaum, Pearson, Karen Pennar, Otis Port
EDITORIAL EDITORS: Duane E. Anderson, Deirdre A. Depke, Amy J. Peter Finch, Jeffrey M. Laderman, William D. Marbach
EDITORIAL OPERATIONS: Thomas J. Reed
EDITOR: Lawrence Lippmann
EDITORIAL DIRECTOR: Laura Baer
EDITORIAL SYSTEMS: Claire Conte Worley
EDITORS: James C. Cooper (Sr. Economist/Business Outlook editor), Thien Madigan (Assoc.), Christopher Farrell, Michael J. Mandel (Economics editors), Gene Koretz (Economic Trends editor)
EDITORIAL EDITORS: Books: Denise Demong, Corporate Financial Light Industries: Thane Peterson, Information Systems: John W. Ventry, International Edition: Joyce Ann International News: Peter Galuszka, Stanley Reed, International Banking: Leah Nathans Spino, Legal Affairs: Michele Marketing: Christopher Power, Mark Landler (Assoc.), Market Investments: Gary Weiss, Money & Banking: John News: Hams Collingwood, People: Michael Oneal, Personal: Donald H. Dunn, Joan Warner, Science: Emily T. Smith, Sports: Fred F. Jespersen, Social Issues: Troy Segal, Technology: Robert Buder, Telecommunications: Peter Coy, Transportation: Andrea Rothman, The Workplace: Aaron Bernstein
EDITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill II, E. Woolley, Laura Zinn, Paul M. Eng (Asst. editor)
EDITORS: Harry Maurer (Deputy chief), Prudence Crowther, Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack S. Jim Taibi (Sr. copy editors), Pam Black, Carl Desens, Hardy Aleta Kaufman, Cynthia McClean, David Pengilly, Malka Percal, Oyalay, Gail Fowler, Dalia Kandyoti, Aida Rosano, Eva Stettner (chairs)
EDITORIAL COPY EDITORS: Donald Halsband (Chief), Hallberg, Kesson, Celine Keating, Robert S. Norman, Lawrence Dark, M. Romanoff
 even Taylor (Deputy director), Cynthia Friedman, Francesca J. Jay Petrow (Assoc. directors), Alice Cheung, Craig Socia (directors), Graphics: Arthur Eves (Director), Joan Danaher (director), Rob Doyle (Sr. Illustrator), Lauree Dams, Mena, Ray Vella (Illustrators), Jaime Beauchamp, Production: J. Romeo (Asst. mgr.)
EDITORIAL: Sue Bloom (Deputy Picture editor), Todd James, Scott Mlyn, Weil (Assoc. Picture editors), Anne Murray (Asst. editor), N. Daly (Researcher), Bettina Baudoin (Researcher - Paris), Mark (Traffic), Lawrence Crowe (Librarian)
EDITORIAL OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne ez, Mary Lee Schneider (Production managers), Thomas R. Sharon L. Eng, Fidel Lee, Jose L. Martin, Jane M. Perkins, turgis, Karen Turok, Ilse V. Walton, Nicholas White (Makeup), Dale I. Arnold, Felix Lindicy, Edgardo Torres (Asst. makeup), Donald C. Pearson (Traffic manager), Bruce M. Arnold, Leo (Production assts.)
EDITORIALS: Atlanta: Chuck Hawkins (Mgr.), Walecia Konrad, t. Gary Williams, Geoffrey Smith, Chicago: Lois Thermen (Mgr.), Julia Flynn, David Greising, Kevin Kelly, Cleveland: r. Schiller (Mgr.), Connecticut: Lisa Dnscoff, Dallas: Wendy (Mgr.), Stephanie Anderson Forest, Detroit: James B. Treese, David Woodruff, Los Angeles: Ronald Grover (Mgr.), Larry (Mgr.), Sr. Correspondent, Kathleen Kerwin, Eric Schme, t. George (Mgr.), Philadelphia: Joseph Weber (Mgr.), Pitts: Michael Schroeder (Mgr.), Maria Mallory, San Francisco: Mitchell (Mgr.), Richard Brandt, Joan O'C. Hamilton, Robert thy Rebello, Seattle: Don Jones Yang (Mgr.), Washington: t. H. Wildstrom (Sr. News Editor), Stan Crocker (News Editor), xrus, Brian Bremner, John Carey, Paula Dwyer, Dean Foust, t. Garland, Howard Gleckman, Douglas Hartbrecht, Peter Hong, wynn, Paul Magnusson, Mike McNamee, Tim Smart, Catherine Christina Del Valle (Asst. editor), Bonn: John Templeman, Sal Schares, Hong Kong: Pete Engardio, London: Richard A. (Mgr.), Mark Maremont, Mexico City: Stephen Baker (Mgr.), t. Rose Brady (Mgr.), Paris: Stewart Toy (Mgr.), Bill Javetski, n B. Levine, Rome: John Rossant (Mgr.), Tokyo: Robert Neff, Neil Gross, Ted Holden, Karen Lowry Miller, Toronto: William orids (Mgr.)
EDITORIAL SERVICES: Broadcasting: Ray Hoffman, Business er: Barbara Boynton, Information Services: Jude T. Hayes r), Judi Crowe (Asst. editor), Fred Katzenberg, Elisa S. Fink, Soong, Office Manager: Roselyn Kopit, Public ms: Christine Summerson, Josephine Coppola, Reprint Per- Lawrence Clayton, Systems: Ina L. Kichen (Mgr.), Ron Courtney Eddy
EDITOR: John W. Patten
EDITORIAL OPERATIONS: G. B. Hopkins
ADVERTISING SALES: Karl A. Spangenberg
EDITORIAL: Gerd Hinske
EDITORIAL: Kitty Carroll Williams
EDITORIAL: Kara Erickson
EDITORIAL: Constance E. Bennett (San Francisco), G. Jarvis Coffin (Chicago), Dan Dunn (Chicago), Molly F. Ford (Northeast- gion), Dan Dunn (Chicago), Molly F. Ford (Northeast- gion), Dan Dunn (Chicago), Molly F. Ford (Northeast- gion)
EDITORIAL: Gary M. Singer
EDITORIAL: Linda F. Carvalho
EDITORIAL: Mano J. Talluto

WE'RE HONORED

We're proud to announce that BUSINESS WEEK has won the most prestigious award in the magazine world: a National Magazine Award. Like a Pulitzer for newspapers, the award is administered by the Columbia Graduate School of Journalism. We were selected by a group of our peers, under the auspices of the American Society of Magazine Editors.

We were honored for our bonus issue, The Quality Imperative, published in October. It is a detailed look at how the U.S. can become more competitive by pursuing high quality in manufacturing, services, and government. Demand for the issue was so great that we had to order a second and third printing. We're grateful to ASME and Columbia for this honor—and to our readers and advertisers for their support.



SOME HITS, SOME MISSES IN INDUSTRIAL POLICY

Your article "Industrial policy" (Cover Story, Apr. 6) on America's competitive position in the global economy hit the nail on the head. We are lagging behind our international competitors in technology. But to me, a statistic just as alarming as those you cite is something we recently discovered: U.S. manufacturers are losing faith in America's ability to lead as product innovators.

A study we recently conducted among U.S. manufacturers with annual sales of \$10 million to \$500 million revealed a distressing loss of confidence:

- Half of all midsize manufacturers believe the U.S. is no longer the worldwide leader in product innovation;
- Another third say that we are No. 1 in this critical area, but that others are catching up; and
- Only 8% say we're No. 1 to stay.

Robert E. Nason
 Executive Partner
 Grant Thornton
 Chicago

You missed our last (and perhaps only) national experiment with an industrial extension service. As recently as 20 years ago, this country had a state-based service, established under the State Technical Services Act of 1965. Several of the existing state programs were created under this program.

There is no question that the U.S. could gain economic benefits from an industrial extension service modeled on the Japanese technology centers. However, the real experience base might be here, with our own experiment and the successful state programs it spawned.

Martin D. Robbins
 Toledo

The sharp decline in productivity growth over the past two decades stems not from a lower rate of public investment but from this country's tax code's failure to distinguish between nominal and real returns on investment. This oversight, combined with the quadrupling of inflation since 1965 (from 1% to over 4%), has added almost two percentage points to the real costs of capital. This dramatic, though hidden, tax

BUSINESS WEEK
 MAY 4, 1992 ***3264
 ISSN 0007-7135



Published weekly, except for one issue in January, by McGraw-Hill, Inc. Founder James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: (212) 512-2000. Domestic Telex: 127960. International Telex: 232955. Cable: McGraw-Hill New York. TWX: 710-381-4879. U.S. subscription rate \$44.95 per year; 2 years: \$74.95; 3 years: \$99.95. Single copies, \$2.75. Write for rates in other countries. Business Week Subscriber Services: 1-800-635-1200. PHOTOGRAPH PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN 0007-7135/92/\$2.75

European Circulation Center, McGraw-Hill House, Maidenhead, Berks, England. Telephone (0628) 23431, Telex: 848640. Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal P.Q. Registration Number 9010. Registered for GST as McGraw-Hill Inc. GST #R123075673. Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Dionne, Chairman, President and Chief Executive Officer; Robert N. Landes, Executive Vice President, General Counsel, and Secretary; Harold W. McGraw III, Executive Vice President; Frank D. Pengilase, Senior Vice President, Treasury Operations.



OS/2

In Canada, call 1-800-445-1234. *Upgrade from Windows: \$49; upgrade from DOS: \$99. \$139 base operating system. These prices valid only when ordered directly through IBM. Proof of purchase required. Dealer prices may vary. Offer valid in U.S.A. only, expires 7/31/92. HelpWare limited to U.S.A. only. IBM and OS/2 are registered trademarks and OS/2 Crash Protection HelpWare are trademarks of International Business Machines Corporation. All other products are trademarks or registered trademarks of their respective companies. ©1992 IBM Corp.

Starting today, everything your computer has ever done, it will do better.

You've created documents, crunched numbers, even conquered alien invaders. Still, your software hasn't really been able to make the most of your hardware. But now it can.

Introducing OS/2® 2.0. It's a new way to take your computer programs beyond the limitations of the past—it lets you do more with them than you ever could with DOS or DOS with Windows:™

It's also a way to run more than one program at a time. Print a document and calculate a spreadsheet while you open files, for example. You can even "cut and paste" between *any* programs—drop text from WordPerfect® 5.1 into a Lotus® 1-2-3® for Windows spreadsheet—the possibilities are endless.

About the only thing better than how much more OS/2 lets you do, is how easily it lets you do it all. Friendly icons fill the screen—even installation is graphically guided. And OS/2 comes with **HelpWare**™: a range of services and support, including a toll-free number. But maybe the best part is that instead of buying DOS, Windows and Adobe Type Manager®, you get them all with OS/2.

With OS/2, your software can catch up with your hardware. And you can do the only thing you haven't been able to do with your computer. Make the most of it. For an IBM authorized dealer near you, or to order OS/2 2.0—at special introductory prices of \$49 for Windows users and \$99 from any DOS—call 1 800 3-IBM-OS2.*



Introducing OS/2 2.0.

- Runs programs made for DOS, Windows and OS/2.
- Runs more than one program at a time so you don't waste time.
- Easy to install, learn and use. Has online help and tutorial.
- Makes the most of 386 SX hardware and above.
- OS/2 2.0 upgrade: \$49 from Windows, \$99 from any DOS.**



It's a Technical Knockout.



The tale of the tape says it all. Weighing in with 210 horsepower, the 24-valve Twin Dual Cam V6 GTP delivers the knockout punch in seconds. One look at its imposing body shows you why. It's pumped to the max and holds its ground with the help of a rally-tuned sport suspension. It moves on aluminum alloy wheels and 16" high-performance Goodyear Eagle GT+4 tires. And it stops with computer-controlled anti-lock brakes. The new Pontiac® Grand Prix™ GTP. Technically speaking, it's pure excitement in motion.

Pontiac Grand Prix GTP. A New Kind of Excitement.



PONTIAC CARES with an extensive 3 year 36,000 mile no-deductible warranty (see your dealer for terms of this limited warranty) plus 24-hour Roadside Assistance. Call toll free 1-800-762-4900 for more product information and dealer locations. [Buckle Up] BUCKLE UP AMERICA! © 1992 GM CORP. ALL RIGHTS RESERVED.

Readers Report

has slowed the growth of private
tal formation per employee from
per year to 0.6%, leading to similar
is in output and real hourly earn-
Congress could devise no better
strial policy than indexing interest
me and capital gains for inflation.

W. N. Cordell II
Palo Alto, Calif.

FAST DO MORTGAGE SAVINGS UNT UP?

gree with "Is a short-term mortgage
etter in the long run?" (Personal
ness, Apr. 13). But the figures are
If I save \$188 a month and get 10%
15 years, I will have \$78,570. Quite a
erence from \$98,900.

Elliott Adler
Boca Raton, Fla.

*Editor's note: The example failed to
e that the higher figure includes the
a savings and investment growth
erated because tax deductions are
er on a 30-year mortgage.*

TEACHING ETHICS ... AN OXYMORON?

ardon my wry smile on reading
"Can ethics be taught? Harvard
s it the old college try" (Top of the
s, Apr. 6). Teaching ethics is certain-
n oxymoron. Ethics is the inherent
r voice, the source of self-control in
absence of external pressure or com-
ion. Teaching about ethics is some-
e else, something that should never
entrusted to a professional school.
t is a clear conflict of interest—un-
cal, if you please.

Wallace F. Smith
Professor of Business Administration
University of California
Berkeley, Calif.

HOW TO FIGURE OUT WHAT TO PAY THE BOSS

ooray for "Executive Pay" (Cover
Story, Mar. 30). I am glad you had
courage to stand up and say what
amed out to be said.
have been accumulating stocks for
years. I have always voted every
xy—and have yet to vote for a stock-
on plan or any form of so-called "in-
cive" plan. I have observed that no
poration has yet offered an "incen-
" plan for shareholders.

Ernest L. Arbuckle
Haines City, Fla.

our article on Tony O'Reilly shows
that you have jumped on the band-
gon with the liberal media in calling

Adoption of our managed health care programs could save U.S. business \$30 billion annually.

We get paid for results.®



EMPLOYEE BENEFITS • CIGNA COMPANIES • DEPT. R4, HARTFORD, CT 06152

"We've been with CIGNA over 50 years. Obviously our city fathers had foresight."

RON GRAVES, CITY TREASURER, RUTLAND, VT

We get paid for results.®



PENSIONS • CIGNA COMPANIES • DEPT. R5, HARTFORD, CT 06152

HELP LAUNCH A NEW PRESIDENTIAL CAMPAIGN.

And Help The Environment, Too!



ALL YOU HAVE TO DO IS PLANT A TREE! A tree grown from the seeds of trees that shade the homes of George Washington, Thomas Jefferson, Franklin Roosevelt, Dwight D. Eisenhower and others. It's all part of The American Forestry Association's Famous & Historic Tree program. But trees from American presidents are only the beginning. Hundreds of Famous & Historic trees have provided offspring for planting in special educational groves all over the country and in America's Historic Forest.

You may select trees with particular relevance to your company's location, product or identity – the Orville and Wilbur Wright Sweetgum, the Clara Barton Magnolia, the Sam Houston Live Oak, the Martin Luther King, Jr. Laurel Oak, the Robert E. Lee Sycamore, the Helen Keller Water Oak or the Gettysburg Sycamore are just a few examples.

Your Company Can Participate By:

- ★ Sponsoring Historic Groves – Groves of twenty or more Famous & Historic trees can be sponsored by your company and planted in designated communities, providing a unique long-term environmental and educational resource.
- ★ Sponsoring America's Historic Forest – A major national project planted entirely with Famous & Historic trees, your company can sponsor historic groves in America's Historic Forest located near Des Moines, Iowa.

No matter how your company participates, you will be helping to improve the environment and at the same time provide an environmental and historical learning resource for generations of Americans. These projects are ideal for employee and client involvement. For every tree you sponsor, a personalized Certificate of Authenticity will be sent to the person you designate.



A project of The American Forestry Association, America's oldest non profit citizens' conservation organization.

To learn more call 1-800-677-0727, or write: Famous & Historic Trees,
Post Office Box 7040, Jacksonville, Florida 32238-7040

Readers Report

—and even designing reform of—top executive compensation. And you say, in a nutshell, why silly, whose base salary is \$514,000, received such a handsome payoff: Enron Co. was worth \$900 million in 1999, and it's worth \$10 billion today—the same number of shares issued, silly] boasts.” And rightly so. And instead of trying to impose for- is and/or caps on top executive pay, don't you turn your attention to the figures? What do they really con- te to the lives of shareholders and oyes?”

James P. Shenfield
Seattle

SBA'S PLACE AT HOME

Our description of the SBA as a major disappointment in “An export is a terrible thing to waste” (Editorial, Apr. 13) belies a lack of understanding of the SBA. It is not the lead agency in this area. We do offer assistance to help small businesses export, but our primary focus is on domestic business development and capital formation.

Export loans to exporters rose from \$42 million in 1990 to \$123 million in 1991. Export revolving-line-of-credit loans increased from \$4.85 million in 1990 to over \$10 million in 1991.

Dan Eramian
Small Business Administration
Washington

RIGHT STATE TREATMENT

Around the article (“Prostate cancer: How to thwart a killer,” Personal Health, Mar. 16) misleading because: The use of radioactive implants is not standard therapy, has never been shown to be equivalent to external beam irradiation, and is not to be routinely recommended (in my view). Reduction of male-hormone production through orchiectomy or new medical treatments results in reduction in pain and decrease in symptoms in most men. It is a poor alternative. While effective, it is toxic and is not often used. There are new and important drugs: Lutealizing hormone-releasing hormone analogs, and antiandrogens.

Donald L. Trump, M.D.
Durham, N. C.

Letters to the Editor should be sent to Readers Service, Business Week, 1221 Avenue of the Americas, New York, N. Y. 10020. Fax: (212) 512-4464, or (212) 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

95 of the top
100 U.S. multinational
companies choose CIGNA
for their insurance coverages.

We get paid for results.®



CIGNA COMPANIES • PHILADELPHIA, PA 19192

You can save
\$4 in benefit costs
for every \$1 invested in
our employee seatbelt program.

We get paid for results.®



SPECIAL BENEFITS • CIGNA COMPANIES • DEPT. R3, PHILA., PA 19192

Books

THE SEVEN FAT YEARS

By Robert L. Bartley
Free Press • \$22.95

AMERICA: WHAT WENT WRONG?

By Donald L. Barlett and
James B. Steele
Andrews & McMeel • \$6.95 (paper)

THE BANKRUPTING OF AMERICA

By David P. Calleo
Morrow • \$22

WHAT REAGANOMICS DID FOR US—OR TO US

A quick quiz. The 1980s were: (a) the decade the middle class got shafted; (b) the decade America went broke; (c) the best years of our lives; (d) all of the above.

Perhaps not since the 1920s has the economic history of a decade been so controversial. Were the '80s a time when a profligate society borrowed from its future to finance LBOs and BMWs? Or did the era break the cycle of inflation and recession and set the stage for a generation of prosperity?

Navigating these crosscurrents can be treacherous. And books with complicated themes rarely sell well. So it's not surprising that two of three new retrospectives of the decade are more caricature than serious analysis.

The most upbeat book comes from

Robert L. Bartley, boss of *The Wall Street Journal's* editorial page and from 1978 to 1982 arguably the nation's most influential journalist. Bartley is an old-style partisan pamphleteer who made supply-side economics part of the American lexicon. During the Reagan Presidency, Bartley was semiofficial publicist for the supply-side revolution. These days, he spends most of his time grousing about the apostate George Bush.

In *The Seven Fat Years: And How to Do it Again*, Bartley tries to convince readers that the years 1983-89 were the prelude to "a new Belle Epoque of peace, prosperity, and progress." He fondly recalls a period when economic malaise was replaced by seven years of uninterrupted growth, the manufacturing sector was rejuvenated, marginal tax

rates were slashed to their lowest level in 50 years, and frightening inflation was brought to heel.

Most of all, for Bartley, it was a time when the theoretical musings of a small group of supply siders—economists, journalists alike—changed America's domestic-policy debate. From every page he fairly cries out: We were right.

As a polemicist, Bartley rates an A. Trouble is, he dismisses matters that simply cannot be ignored.

For instance, Bartley argues that radical corporate restructuring that largely defined the '80s was both inevitable and good. He has a point. By the '70s, U.S. manufacturing just couldn't compete in world markets. Its workers were paid too much, its equipment was obsolete, and it was stifled by management that did little but protect it from change. The restructuring was agonizing but probably necessary.

That didn't make it any easier on workers caught in the transition. So many lost jobs they had held for years. Many ended up in lower-paying service jobs. Yet Bartley blandly dismisses all this as the "leaning of payrolls."

If the phenomenon of stagnant wages comes is insignificant to Bartley, it's

TIMELY Q

When your customers need to buy

EDS helped Kmart answer yes.

In a difficult year for retailers, Kmart achieved record profits

They did it thanks, in part, to one of the world's most comprehensive, highly integrated point-of-sale bar coding and scanning systems. Developed in partnership with EDS, it helps

Kmart identify and respond to shifts in customer buying patterns with **unprecedented speed and accuracy.**

Every day, satellite hookups feed sales information on more than 200,000 items from more than 2,300 stores to merchandise managers in Troy, Michigan. This enables them to

Bartley praises Reagan fiscal policy, Barlett and Steele damn it. But Calleo focuses on deficits



ment shelled out about \$450 billion in benefits to the nation's elderly, many of whom are middle-class children. And an additional \$100 billion went to depositors of failed banks and thrifts—most of them also middle class.

The questions of whether society should care for its elderly or insure bank deposits are important and complex. But they're not examined by Bartley and Steele.

Both books target Reagan tax policy. And both suffer serious cases of

sion of two *Philadelphia Inquirer* writers, Donald L. Bartley and James Steele. Indeed, for them, the very tax that Bartley praises set the stage for a gigantic rip-off of the middle class. They argue that the political system is corrupt, the Japanese have been eating the economic lunch, and the Mexicans will be doing the same. Wall Street and tax changers raped our companies, looted our pensions. Washington did what was left through misguided legislation and deregulation. Even

tax reform took from the middle class and provided a huge windfall to the rich.

America: What Went Wrong is filled with heart-rending anecdotes and reams of statistics. It, too, wins an A+ for polemics. But like Bartley, the *Inquirer* reporters tell only part of the story. In their simple world, the sole measure of tax policy is fairness. Economic growth is not an issue, nor is the fact that while the middle class pays billions in taxes, it also receives billions in federal benefits.

Last year, for instance, the govern-

ment suffered from astigmatism. For instance, Bartley praises the Reagan rate cuts of 1981 but ignores provisions that set the stage for the decade's wild real estate speculation. When that bubble burst, so did economic expansion. Similarly, Bartley ignores the huge tax hikes in 1982, '83, and '84 that neutralized much of the '81 stimulus.

For the economy as a whole, the federal tax burden actually changed very little over the past dozen years. And despite Bartley's and Steele's claims to the contrary, the tax code is about as pro-

QUESTION:

Again, will they buy from you?

swiftly and accurately identify what's hot and what's not. Within a season. Within a region. Even store by store. This helps ensure sufficient inventories of fast-moving items, where needed, when needed.

But the benefits don't stop there. The system **helps speed customers**

through checkout lines 25% faster than before and also helps prevent pricing errors.

The results have been impressive. Customer **satisfaction and repeat sales are up.** Way up. So are profits.

Changes in technology create opportunities to improve service and

increase profits. To learn how, contact EDS, the world leader in applying information technology. Write Barry Sullivan, Director of Marketing, EDS, 7171 Forest Lane, B2, Dallas, TX 75230. Or call (214) 490-2000, ext. 102.



TAKE ADVANTAGE OF CHANGESM

The Graduation Memory I Always Carry



Crafted To Express A Lifetime

CROSS
SINCE 1846

G R A D U A T I O N — 1 9 9 2

UNQUESTIONED LIFETIME MECHANICAL GUARANTEE.

Lotte, The VIP's Choice

**"The service
mainly. It's
impeccable."**



Earl S. Moore, Jr., President of Asia Pacific Marketing

We're pleased that a good and growing number of our guests come back to stay with us.

Why? As Mr. Moore of Asia Pacific Marketing explains, it's the "impeccable service" they appreciate most. "Discrete and unobtrusive," in Mr. Moore's words.

While the reasons vary from one return guest to the next, they all share an uncompromising taste for excellence.

And at Lotte they find excellence in service and facilities.

Shouldn't the Lotte be your hotel in Seoul?



Member in Seoul, Korea



For Reservations: New York: (201) 944-1117, Toll Free 800-22 LOTTE, LA: (310) 540-7010, Toll Free 800-24 LOTTE, London (071) 323-3712/4
Hotel Lotte: C.P.O. Box 3500 Seoul, Tel. (02) 771-1000, Telex LOTTEHO K23533/4, Fax (02) 752-3758, Cable: HOTELLOTTE

Books

gressive now as it was in the late 19

Johns Hopkins University Professor David P. Calleo brings yet a third voice to the party. *The Bankrupting America: How the Federal Budget Impoverishing the Nation* is of rough going. But it makes an important point dismissed by both Bartley and *Inquirer* writers. Calleo argues that the real red ink is the principal cause of underlying weakness in the U.S. economy. His message is hardly unique, as a specialist in European studies. Calleo provides a broader-than-usual view of Washington's deficit spending.

The Reagan tax cuts, he argues, were a fiasco—not because they were unpopular but because they were combined with huge increases in spending and a "stagflation" monetary policy that attempted both accommodate big deficits and restrain inflation. That policy mix in the early '80s sent the dollar soaring, making U.S. goods so costly that American manufacturers could no longer compete globally, and ultimately drove American manufacturing offshore. That's a controversial theory, but at least it recognizes the complexities and the often-unintended consequences of policy.

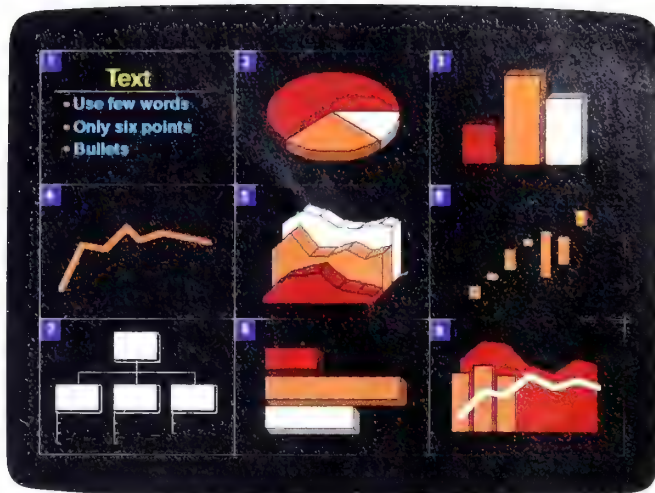
Calleo has a clearheaded view of the deficit's causes. It was not so much Reagan's tax cuts, which pretty much kept federal revenues steady, as it was increases in spending—for defense, health care, interest on the debt, deposit insurance. As Calleo sees it, the public "balked at paying a higher price for the federal government's package of goods and services. A fiscal deficit was the path of least resistance."

The worldwide economic boom of the mid-'80s meant there was plenty of money sloshing around the economy. Those dollars readily financed the deficit, private capital investment, Wall Street paper-shuffling, and golf-club memberships for overpaid chief executives.

But did all that spending set the stage for a new round of economic growth? After all, an improved standard of living should be the true measure of economic policy. If Reaganism succeeded, all the workers Barlett and Steele worry about will come out O.K. If it didn't, they may have seen the most colossal waste of resources in U.S. history. Barlett asks the right question—how does fiscal policy make the economy grow?—and refuses to admit how complicated the answer is. Barlett and Steele, with their exclusive focus on fairness, are barking up the wrong tree. It is Calleo who provides the most satisfying view of what really happened in the '80s.

BY HOWARD GLECKMAN

Washington Correspondent Gleckman has covered tax and budget policy since 19

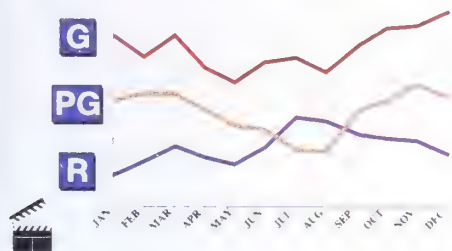


1. Know your audience. To know them is to understand them and to understand them is half the battle.

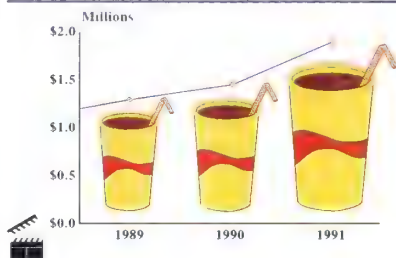
2. Choose your weapon. Or why start from scratch when we already have 160 charts? Just plug in the data.

MOVIE-GOERS TURN NICE

Trend is toward G-rated movies



THE FIZZ IN SODA SALES



3. Assume there will be changes. Our program lets you import or export data directly. Charts adjust automatically.

4. End on a solid note. Or transparency. Or slide. Our program lets you print to whatever format works best for you.

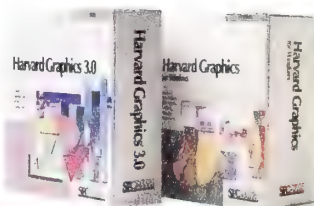
A simple guide to making fearless presentations.

Sweaty palms, cotton mouth and knee-knock. There's a remedy for them all: Harvard Graphics® from Software Publishing Corporation.

It's an easy-to-use software program, in DOS and Windows™ versions, that gives you the tools you need to create strong, effective presentations.

The kind of tools that can solve even the worst case of jitters.

SPC SOFTWARE PUBLISHING CORPORATION



1-800-336-8360 for a Harvard Graphics demo disk (Operator 889 for DOS, 890 for Windows). It's as simple as that.

Harvard Graphics is a registered trademark of Software Publishing Corporation. Windows is a trademark of Microsoft Corporation. © 1992 Software Publishing Corporation, 4165 E. River Rd., Santa Clara, CA 95051

This announcement is neither an offer to sell nor a solicitation of offers to buy any of these securities. The offering is made only by the Prospectus, copies of which may be obtained in any State in which this announcement is circulated only from such of the undersigned as may legally offer these securities in such State.

April 1, 1992

18,800,000 Shares

 **YORK[®]** INTERNATIONAL
CORPORATION

Common Stock
(\$.005 par value)

Price \$31.75 Per Share

These securities are being offered in the United States and internationally.

United States Offering
15,040,000 Shares

The First Boston Corporation

Prudential Securities Incorporated

A.G. Edwards & Sons, Inc.

Goldman, Sachs & Co.

Lehman Brothers

Merrill Lynch & Co.

J.P. Morgan Securities Inc.

Morgan Stanley & Co.
Incorporated

PaineWebber Incorporated

Salomon Brothers Inc

S.G. Warburg Securities

Dean Witter Reynolds Inc.

First Manhattan Co.

Freimark Blair & Company, Inc. **Janney Montgomery Scott Inc.** **C.J. Lawrence Inc.**

Neuberger & Berman

Stifel, Nicolaus & Company
Incorporated

International Offering
3,760,000 Shares

Credit Suisse First Boston Limited

Prudential-Bache Securities

ABN AMRO Bank N.V.

COMMERZBANK
AKTIENGESELLSCHAFT

Daiwa Europe Limited

N M Rothschild & Sons Limited

Société Générale

Swiss Bank Corporation

S.G. Warburg Securities

OUNCED CHECKS? IAT'S NOT THE REAL PROBLEM

AN S. BLINDER



le the harmless
 se banking
 adal' draws the
 light, a blatantly
 functioning
 gress costs us
 ns. Punishing
 y misdeeds but
 ising highway
 very sends just
 wrong signal

Citizens of democracies have long railed against their elected representatives. Aristophanes once insulted someone as displaying "all the characteristics of a popular politician: a horrible voice, bad breeding, and a vulgar manner." Normally, this is not only good sport but also serves a constructive purpose: encouraging humility in high places. But you can have too much of a good thing. Today's mean-spirited trivialization of American politics holds dangers that seem not to be widely appreciated. I say so for two reasons.

The first is the "penny wise, pound foolish" phenomenon, best illustrated by the hysteria over the House banking "scandal." According to media reports, these shenanigans may cost dozens of incumbents their jobs. But what actually happened? Hundreds of members of the House of Representatives received interest-free loans from a shoddily run bank, which was able to give costless credit because hundreds of other House members foolishly left money on deposit at zero interest. Strange banking practices, to be sure, but where's the damage to the taxpayer?

While all this was going on, the daily actions and inactions of a blatantly nonfunctioning government were costing taxpayers billions. The inexcusable procrastination over the savings and loan cleanup is only the most spectacular example. Our divided government has also proved itself incapable of dealing with the budget deficit—a molehill that has been allowed to grow into a mountain. The system allows interest groups to thrust their hands into the taxpayers' pockets every day, thereby removing great gobs of money. Yet the electorate has been turned into what Justice Clarence Thomas might call an electronic lynch mob—not because of any of this, but because of a few (well, a few thousand) bad checks covered by fellow members of the House. It's as though we condemned a master criminal for jaywalking.

FEEL-GOODISM. Some observers detect a kind of rough justice in all this—like putting Al Capone away for tax evasion. But this attitude ignores a lesson children learn: Two wrongs do not make a right. If we exact a pound of flesh for petty misdeeds but leave highway robbery unpunished, we send precisely the wrong signals to our politicians. The message should be: Take a few crumbs, but leave the cake for us. Unfortunately, American voters are now saying the opposite.

The crumbs bring up my second reason for concern: the "you get what you pay for" phenomenon. According to popular myth, members of Congress are a pampered bunch of lazy, incompetent, aloof dukes and duchesses

who are sadly out of touch with the common people. The truth is closer to the reverse.

Far from being out of touch, politicians have their antennae finely tuned to current realities. Our elected representatives understand that divided government turns American politics into an unattractive game of "pin the blame on the donkey" (or elephant). They know that a decade of feel-goodism has left the electorate unwilling to face hard truths. And they realize that government by television puts the payoffs in sound bites, not sound policies. Democracies get the government they deserve. If the system provides incentives for politicians to behave like knaves or fools, we should not be surprised when some do.

Nor is it obvious that being in the House of Representatives is a good job nowadays. The hours are long, and, unlike senators, House members are not movie stars. Despite last year's much-maligned pay hike, salaries remain well below what other top professionals earn. And Representatives get less respect than Rodney Dangerfield. I, for one, would not trade places with my congressman even if I were somehow spared the agony of an election campaign.

STRICT STANDARDS. This all matters because many men and women of Congress—certainly the best of them—have ample talent to pursue other rewarding careers. If we make life on the Hill sufficiently unattractive, many of them will. Under the American system of government, members of Congress are Very Important People who make very important decisions. Like other VIPs, they have a right to expect certain perks of office, which we citizens should not begrudge them. In return, we should expect—no, demand—a high standard of integrity and competence.

I propose a deal: Raise congressional pay and offer generous expense allowances for, say, necessary entertaining and trips home—strictly audited, of course. In return, ban all outside earnings, and demand adherence to the same tough conflict-of-interest rules applied to top appointed officials. Finally, finance all Presidential and congressional campaigns publicly. We've had enough of "the best Congress money can buy." Such a deal might cost taxpayers a few hundred million dollars a year. But these millions can buy us billions in better government.

Unfortunately, the American body politic and the media now seem hell-bent on making service in Congress about as appealing as a vacation in Libya. If this continues, we will be left not with the best and the brightest but with power-hungry dullards who can't hold any other job. It is not an appealing thought.

BLINDER IS THE GORDON S. FRIEDLANDER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON. HE IS THE AUTHOR OF *GROWING PAINS*.

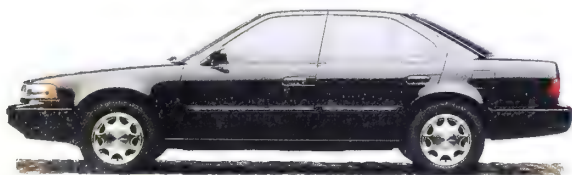
THIS IS WHERE THE HOOD ORNAMENT

With some luxury sedans, you almost expect to discover somewhere down on the itemized bill of sale a line that simply reads, hood ornament \$10,000.

After all, that is what you are unquestionably paying for — status, prestige, cachet.

At Nissan®, however, our engineers have always adhered to the philosophy that a luxury car should cater to a driver's intelligence and soul instead of to his ego.

It was from this philosophy that the highly acclaimed Maxima® GXE was born.



Maxima GXE shown in Super Black with optional Luxury and Leather Trim Packages. ABS brakes and driver's side airbag.



Inside you'll find the kind of lavish, endowed environment normally reserved for sedans fetching thousands more: including a Digital Touch Entry System, air conditioning, power windows and door locks, AM/FM cassette with Dolby® and a sophisticated theft deterrent system.



Nissan, Maxima and Maxima GXE are trademarks of Nissan North America, Inc. *Some equipment only, available at purchase. **Price is comparison of dealer's total price versus original MSRP as reflected in each of the Kelley Blue Book Weekly.

ONEY FOR THE ENT WENT.



Of course, no expense has been spared on the interior that lies beneath the hood. There you'll discover a sequential, multi-point, fuel-injected 160 hp V6 engine guaranteed to give your central nervous system a very thorough workout.

Now that you see what we put into a Maxima, consider what you get out of it. Our '89 GXE has retained more of its original

For those whose idea of luxury is something akin to a penthouse on wheels, an array of optional equipment* awaits you: such as a power adjustable driver's seat, power sunroof, anti-lock brakes, driver's side airbag, CD player and seating surfaces carefully appointed in fine leather.

suggested price than either the '89 BMW 525i or the '89 Acura Legend Sedan.**

Further proof that what car owners today truly cherish the most isn't what lies on top of the hood, but the car beneath it.



BUILT FOR THE
HUMAN RACE.

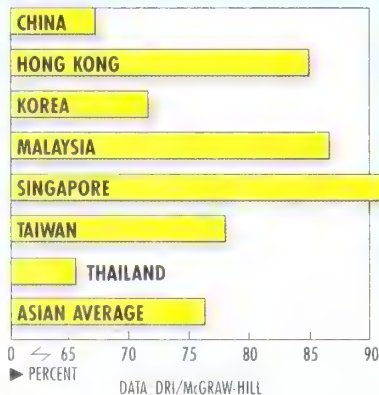
BY KAREN PENNAR

THE U.S. AND MEXICO: A CLOSER LOOK AT THE COSTS OF FREE TRADE

What would be the consequences of free trade between Mexico and the U.S.? Proponents of a North American Free Trade Agreement (NAFTA), which would unite the U.S., Canada, and Mexico in a free-trade zone with 360 million consumers, say it's a win-win prospect, with all participants sure to enjoy enhanced trade and growth. Opponents view free trade as a win-lose proposition, with Mexico set to gain jobs and output mostly at the expense of U.S. workers. Two recent studies suggest that the likely outcomes won't be so clear-cut. For one thing, many victims won't be anywhere near North America. And trade creation will indeed hurt low-skilled workers in the U.S., but high-skilled workers may gain.

WILL MEXICO DISPLACE ASIA IN U.S. MARKETS?

PERCENT OF COUNTRY'S EXPORTS TO U.S. THAT COMPETE DIRECTLY WITH MEXICO'S LEADING EXPORTS



DRI/McGraw-Hill argues that the most probable near-term impact of NAFTA's adoption will be on low-cost Asian producers who export to the U.S. and Canada. Mexico already boasts a stunning wage advantage: Hourly compensation in manufacturing amounted to \$2.03 in 1991, while the four Asian tigers—Hong Kong, Korea, Singapore, and Taiwan—averaged \$4.10 an hour. (For the U.S., the figure was \$15.33 in 1991.)

A free-trade agreement will lift existing tariff and nontariff barriers and thus give Mexico a further advantage. DRI/McGraw-Hill predicts that Mexico will be most competitive in product lines that most overlap those of Asian producers—electrical machinery and consumer electronics, for example. Mexico should

be viewed as a threat by such countries as Singapore: Fully 91% of its U.S. exports are in product lines in which Mexico enjoys success (chart). Asia swamps Mexico, though, in exports to the U.S. of apparel and office equipment.

If trade diversion was the only consequence of free trade between Mexico and the U.S., then the effects of NAFTA would hardly be felt here. Over time, however, Mexican producers are likely to target new industries, and Asian and other manufacturers increasingly will use Mexico as a platform for entering the U.S. market, thus evading whatever protective measures apply to non-NAFTA countries, argues Edward E. Leamer, an economist at the University of California at Los Angeles. Looking at the history of changes in relative prices of labor- and capital-intensive goods as foreign competition rises, Leamer predicts that over several years, this commitment to free trade will reduce real annual wages for low-skilled work in the U.S. by about \$1,000, while annual earnings for high-skilled work could rise as much as \$6,000. "Everyone need not benefit from increased international commerce," he concludes.

BANKS, LENDING, AND RECOVERY: A NEW, UPBEAT THEORY

A year ago, growth in M2, the monetary aggregate consisting of currency and bank and thrift deposits, was sagging, and what seemed a nascent recovery soon petered out. Now, after a rebound early in the year, M2, the money measure that the Federal Reserve seeks to control, is in retreat, giving rise to renewed worries that once again, recovery may falter.

Not to fear, say some Wall Street economists. The narrower M1 has been growing strongly even though M2 has sagged, and a number of special factors suggest that both M1's strength and M2's weakness may be overstated.

Low interest rates, says economist Robert V. DiClemente at Salomon Brothers Inc., mean that it doesn't cost much for depositors to keep money readily available in the checking and NOW accounts counted in M1. Mortgage principal payments have surged, and those monies are lodged in checking accounts that inflate the M1 measure. The broader M2 measure, meanwhile, may be held down by restructuring in the banking and thrift industries, which has shrunk overall deposits. The impact can be seen on the lending side. Economists at Merrill Lynch & Co. observe that as recent-

ly as 1985, banks and savings and together accounted for more than 50% of private nonfinancial debt. Today, that share is down to 37% and sinking. M2 growth may not be as vital to economic recovery as it was in the pa-

DEFENSE CUTS CONTINUE TO DRAW BLOOD

Why does the U.S. economy sputter? Some say that consumers still have too much debt from the 1980s. Others believe that cuts at bloated corporate behemoths are depressing spending.

But according to the latest government statistics, it's defense cuts that must assume a large share of the blame. Since December, 1991, U.S. production of final goods—consumer goods plus equipment and machinery—by business and government for its own use—has fallen by 0.3%. Of that drop, roughly 75% has come from the output of missiles, submarines, and military equipment.

The same story holds for manufacturing employment. Over the past year, manufacturing has lost 300,000 jobs, six key defense-dependent industries—ordnance, communication equipment, navigation gear, aircraft, ships, and guided missiles—account for almost 40% of that decline, even though they make up 8% of the manufacturing workforce. Indeed, since a machinist or welder laid off by a defense contractor may put off buying a new car, couch, or stove, the defense cuts are having a ripple effect across the economy. With more cuts sure to come, strong recovery may be elusive for a while.

With Michael J. Mandel in New York

THERE'S MORE THAN ONE WAY TO TURN ON THE SPENDING TAP

Early tax refunds may have boosted consumer spending early in the year. Something else likely to have helped spending a lift, say economists at Goldman Sachs & Co., was a sudden increase in federal benefit outlays. The three months ended February saw Veterans Benefits Administration and Veterans Health Administration spending surge 11.5% over outlays a year earlier. This outsize gain should be viewed as temporary, and consumers may revert to more "cautious" spending behavior, predict Goldman Sachs economists.

Acer believes there is room for a different kind of computer company. One that not only offers everything from entry level PCs to 200 person UNIX™ networks, but designs them to grow when you do. Advance when technology does. And work as hard for your money as you do.

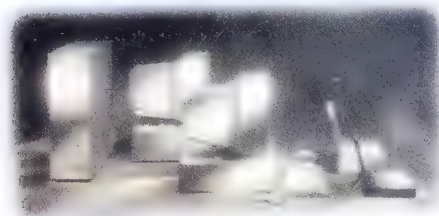
For example, Acer invented ChipUp™. A breakthrough technology that allows you to upgrade a

Today, just about everyone can use a computer. That's why we make a computer for just about everyone.

386SX system to a 486 simply by adding a new chip. It's like buying a new computer

for the price of a single chip.

For people on the go, the AcerAnyWare™ notebook computers pack the power and features of machines



5 times their size—for prices that are less than most other notebooks. There's a full range of high-performance, low-cost models to choose from.

We can also make a lot of people happy all at once. Our 64-bit bus, multiprocessor AcerFrame™ file servers bring minicomputer performance to your desktop. And they're backed by our 10 years of experience in UNIX systems.

We invite you to see the complete range of Acer computers, including our affordable AcerMate™ line. And ask about our wide selection of AcerView™ monitors, laser printers, keyboards and other peripherals.

Call 1-800-SEE-ACER in the U.S. and Canada and tell us exactly what you need. And then we'll give

you exactly what you want.





**WHEREVER YOU DO BUSINESS AROUND THE WORLD,
WE'RE PART OF THE LOCAL FABRIC.** At the AIG Companies, our business

takes us from the canyons of Wall Street to the marketplaces of East Asia to the bazaars of the Middle East. And there's more to being global providers of insurance than just being a long way from home. AIG traces its roots



hanghai in 1919, and today our network stretches across 130 countries and jurisdictions. We hire local
agers who understand the business practices and needs of their own markets. If you're a multinational
pany doing business in today's fast-changing world, you need our unique global reach and global experience.

IG **WORLD LEADERS IN INSURANCE AND FINANCIAL SERVICES.**

American International Group, Inc., Dept. A, 70 Pine Street, New York, NY 10270.



"How's the new proposal?"

"Finished."

"C'mon, the research alone..." "That was the easy part."



"Easy! I hope it's right."

"The client said we nailed it."

"You already turned it in?"



"Days ago. We were first."

"Hey, are we talking some kind of secret weapon here?"

The answer is in Dialog.

Information—complete, precise, up-to-the minute. It's your most powerful business tool. Find exactly what you need to know fast in Dialog,[®] the world's first and largest electronic library. We offer over 400 diverse, detailed databases readily accessible online via computer and modem, many even

on compact disc. You probably won't have to look anywhere else. See your Information Specialist about Dialog. Or call for a free kit on Dialog information for your industry.

1-800-3-DIALOG

Outside U.S., 415-858-3785. Fax 415-858-7069

Dialog Business Tools: For marketing, finance, manufacturing, and management. Full-text industry reports, financial tables, worldwide company data, market data, patents and trademarks, technical articles, current news. From D&E, S&P, Reuters, Teikoku, McGraw-Hill, Knight-Ridder, and many other sources. Many updated daily, even continuously.

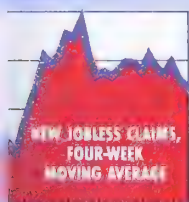
DIALOG INFORMATION SERVICES, INC.
A KNIGHT-RIDDER COMPANY

HIS PUZZLE IS MISSING JUST ONE BIG PIECE: JOBS

The economy has been sputtering during the past year because one key piston keeps misfiring. That's job growth, and a recovery cannot keep moving forward under its own power without it. The latest data show that housing, exports, and especially consumer spending were pumping hard in the first quarter. Now, there are some hints that the labor markets are getting ready to kick in.

When the Commerce Dept. reports on first-quarter gross domestic product on Apr. 28, real GDP will show a healthy combination of strong growth in demand and a sharp drawdown of inventories. That mix bodes well for output gains in the second quarter. But unless companies start beefing up their payrolls, the lack of sufficient wage growth will prevent the economy's gains in the first half from carrying over into the second.

EARLY SIGNS OF A HOTTER JOB MARKET?



15,911
THOUSANDS, ANNUAL RATE
DATA: LABOR DEPT., BW

headed lower (chart). The declining trend could be an early signal of fatter payrolls when the government reports on April employment growth on May 8.

SMALL COMPANIES HAVE BIG PLANS

New claims greater than 400,000 per week still suggest a sluggish economy, but the recent decline may well continue. Companies profess dramatically improved hiring intentions for 1992, buoyed by their growing optimism about the economy, according to Dun & Bradstreet's annual employment survey of 5,000 companies. Although companies with more than 25,000 workers plan to cut jobs, small operations that employ fewer than 25 workers will more than offset those losses, says Dun & Bradstreet, for a total gain of 1.9 million new jobs. These plans are consistent with the increasingly upbeat mood of small businesses as measured by the National Federation of Independent Business. The NFIB's index of small-business optimism about the future rose in the first quarter, to the highest reading in a year. The gain takes the index back to its pre-recession level. Of course, these are only expectations. Last year at

this time, amid postwar euphoria, companies told D&B that they planned to add 850,000 workers in 1991. But the recovery fizzled, and employment actually fell. This time, though, the economy's fundamental supports are much stronger—and more capable of generating the job growth that a lasting upturn needs.

HOUSING STARTS KEEP CLIMBING

The housing recovery remains a pillar of strength. In March, it was like the U.S. Postal Service: Not snow nor rain nor gloom of higher interest rates stayed homebuilders from their rebound. The month's late-winter storms in the northern half of the country led to forecasts of a decline in residential construction. Instead, housing starts jumped 6.4%, to an annual rate of 1.37 million (chart). That was the fourth consecutive gain, which lifted starts to their highest level in two years.

The March advance was also a bit surprising because mortgage rates had inched above 9% by midmonth. That probably worked to the advantage of builders, though, because some buyers may have signed construction contracts on fears of further interest-rate increases.

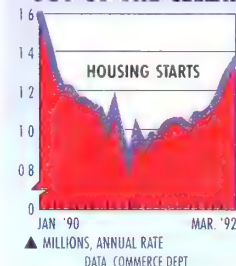
The housing rebound—now 14 months old—may take a breather in April, however. Starts of multifamily buildings soared in March, accounting for all of the month's gain. The jump was probably a fluke because the apartment sector is suffering from a glut of existing units.

Starts of single-family homes, which dropped 2.7% in March, may take up some of the expected slack in multi-unit construction in April. Mortgage rates slipped to a national average of 8.79% in the week of Apr. 17, according to HSH Associates, and cheaper mortgages will make home buying affordable for more consumers.

Looking further ahead, builders are generally optimistic, although the April reading on their future expectations did show a twinge of caution. The National Association of Home Builders reports that the percentage of builders who expect good sales over the next six months fell to 40% last month, from 42% in March. But that's still relatively high, and buyer traffic was down only a bit from March's busy level.

Of course, builders are not the only ones to gain from the housing recovery. Makers of home-related goods, from carpeting to microwaves to hardware, are also reaping the benefits. Indeed, the 26.4% annual rate of

HOMEBUILDING HEADS OUT OF THE CELLAR



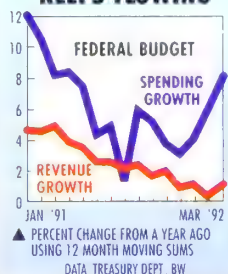
▲ MILLIONS, ANNUAL RATE
DATA: COMMERCE DEPT.

Business Outlook

rise in the combined sales of furniture and building-material stores was a driving force behind the jump in retail sales in the first quarter. As long as the housing industry remains buoyant, retailers and manufacturers of home-related goods will also be busy.

The risks to the housing rebound remain the outlooks for jobs and interest rates. The D&B forecast of snappier job growth this year should provide support for housing demand. But the jitters in the bond market, which have pushed the yield of 30-year Treasury bonds back above 8%, could slow some of homebuilding's momentum.

WHY THE RED INK KEEPS FLOWING



One big worry for bond traders remains the massive borrowing needs of the U.S. government, which will hit the market at the same time as the financing needs of the recovery begin to pick up. The Treasury Dept. said that the budget was in deficit in March by \$49.4 billion, up from \$41.2 billion in March of last year. That brings the red ink for the first half of

the fiscal year to \$196.9 billion, up 29% from last year's first half. Through March, outlays were accelerating—perhaps via some election-year pump-priming—and receipts were growing at a snail's pace (chart).

The good news is that the deficit for the full 1992 fiscal year now seems likely to end up less horrendous than the \$375 billion to \$400 billion most analysts had expected. In fact, it could end up below \$350 billion—though that's still far above 1991's \$268.7 billion.

That's partly the result of a slowdown in Resolution Trust Corp. spending on the thrift-industry bailout—not because the problem is going away, mind you, but because the RTC has chosen to slog more slowly through the mess. So far in the first half of fiscal 1992, RTC outlays are far behind last year's pace, and they will fall

well short of the anticipated \$80 billion. The benefit, temporary as it may be, could be less pressure on credit markets—and on long-term interest rates—in summer, when Treasury borrowing is expected to slow.

EUROPE AND JAPAN HOLD BACK EXPORTS

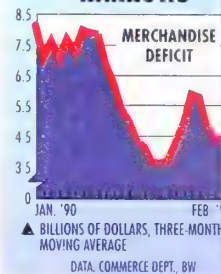
That other deficit—the one in merchandise trade—is more supportive of the recovery. Exports jumped 6.8% in February to \$37.8 billion, the largest monthly gain in more than a year. And imports dipped 0.4%, to \$40.2 billion. As a result, the February trade gap shrank to \$3.4 billion, the smallest in nine years.

The February performance means that foreign trade was a plus for real GDP growth last quarter, a further lift to final demand in addition to housing and consumer spending. The three-month average of the trade deficit shows the recent trend of improvement (chart).

However, the trade deficit will not continue to improve at February's pace. Exports of aircraft surged 44% in February, accounting for a chunk of the export gain. Also, weak economies in Europe and Japan will stunt the growth of U.S. shipments. Still, developing nations in Latin America and the newly industrialized countries in Asia are taking up some of the export slack. Since exports now account for about 20% of U.S. industrial production, factory output and employment will benefit enormously when Europe and Japan finally shake off their troubles.

In the meantime, faster job growth is imperative for the U.S. to assume its traditional role as the engine of world growth. A U.S. recovery will lift other countries and in the process maintain the export gains that will provide even more fuel to keep the economy humming.

THE TRADE GAP NARROWS



THE WEEK AHEAD

GROSS DOMESTIC PRODUCT

Tuesday, Apr. 28, 8:30 a.m.

The economy likely grew at an annual rate of 1.7% in the first quarter, say economists polled by McGraw-Hill Inc.'s MMS International. In the fourth quarter, real GDP rose at a mere 0.4% pace.

EMPLOYMENT COSTS

Tuesday, Apr. 28, 8:30 a.m.

Wage and benefit costs likely increased by 1% last quarter, a little faster than the 0.6% rise in the fourth quarter.

NEW SINGLE-FAMILY HOME SALES

Tuesday, Apr. 28, 10 a.m.

New homes probably sold at an annual rate of 610,000 in March, about the same

sales pace as in February. Higher mortgage rates in March prevented any significant gains in home buying.

PERSONAL INCOME

Wednesday, Apr. 29, 10 a.m.

Personal income likely rose 0.3% in March, after a 1.1% jump in February. The MMS group projects that consumer spending grew 0.1% in March, after a 0.9% gain in February. Rising service demand offset a drop in goods buying.

LEADING INDICATORS

Thursday, Apr. 30, 8:30 a.m.

The composite index of leading indicators likely advanced by 0.4% in March, the third increase in a row. In February, the index was up a strong 0.8%.

FACTORY INVENTORIES

Thursday, Apr. 30, 10 a.m.

Manufacturing inventories were probably little changed in March, after a string of five declines, including a 0.9% drop in February.

CONSTRUCTION SPENDING

Friday, May 1, 8:30 a.m.

Building outlays were probably up 1% in March, thanks to a jump in home building. Spending fell 0.4% in February.

NAPM SURVEY

Friday, May 1, 10 a.m.

The Purchasing Managers' Index of industrial activity likely rose to 55% in April, from 54.1% in March.

“When the earthquake hit, I watched helplessly as my poor LaserJet went crashing to the floor.”



—James Cost, Chief of Police, Campbell, CA

“The LaserJet fell from about four feet,” said Police Chief James Cost, recalling the disastrous San Francisco earthquake. “I assumed we’d have to buy another one. But later, my secretary plugged it in and printed a document. It’s about the only thing that did work that day.”

Reliability is only one of many reasons more people use HP LaserJet printers than all other

laser printers combined. Some people cite innovations like Resolution Enhancement technology, which creates sharper edges and better overall print quality. Or genuine PCL5 printer language. Or the range of options, with five printers priced from \$1,249 to \$5,495.*

To hear what other customers have to



say about HP LaserJet printers, call 1-800-752-0900, Ext. 2987 for a free video. And see why so many people have an unshakable faith in HP quality.

HP LaserJet Printers.



*Suggested U.S. list prices.
© 1992 Hewlett-Packard Company PE12353

MAY 4, 1992

CRUNCH TIME AT DEC

**AMERICA'S NO. 2
COMPUTER MAKER
IS FLOUNDERING.
WILL ITS RISC
MACHINES SAVE
THE DAY?**



**OLSEN: "FROM A STRATEGIC
POINT OF VIEW, WE'RE
VERY MUCH IN CONTROL"**

Digital Equipment Corp. plans Apr. 27 to welcome some 25,000 of its most important customers to Boston's World Trade Center for DECworld, a biennial technology carnival that showcases the company's wares. But it won't be anything like DECworld 1987, when the minicomputer maker was at the top of its game. Then, no expense was spared. The company rented all the best hotel rooms for miles around and housed the overflow on the QE2. It even paid to have a pier extended to accommodate the famous ocean liner. Customers and DEC employees mingled for 10 days of parties and seminars. There was little pressure to close deals—after all, sales of VAX minicomputers were setting records.

At this year's gathering, the mood is anything but festive. For the first time, DEC's sales force has been given strict orders to invite only real prospects to DECworld—and they've been given a task for closing deals during the show. The \$14 billion company, once a threatening No. 2 to IBM, is becalmed—analysts say, rudderless. Minicomputer sales, which together with related s

AT THE MOMENT, MORE PROBLEMS THAN SOLUTIONS

CEO Ken Olsen faces the toughest set of challenges in his 35 years at the once booming but now shrinking computer giant

SERVICES

To get away from falling computer profits, DEC is selling service and consulting. One of its best efforts, software, grew 17% last year

ware and service fees contribute 90% of the company's revenue, fell 15% last year and tumbled more than 20% in the quarter ended Mar. 28. Forays into mainframes and other new businesses aren't doing well. High costs are producing operating losses. And management seems to be in a perpetual shakeup. **'THE QUARTER FROM HELL.'** That moniker is Chief Executive Kenneth H. Olsen's. He must preside almost single-handedly over a critical transition to a new technology that could fuel the company's turnaround. But increasingly agitated investors, former employees, and com

industry gurus question whether he is up to the job. "Ken is panicked. Has no idea what to do here," says John Bell, the designer of the VAX line who resigned in 1983.

Olsen, no surprise, disagrees. "From a strategic point of view, we're very much in control," he says. "History will show that our strategy has gotten us to No. 2 or 3 in the industry." Indeed, history is on Olsen's side: The mercurial entrepreneur, who launched the company 35 years ago and is the longest-reigning leader of a major computer company, has proved that he knows how to pull a company out of a slump. But Olsen has never had one like this.

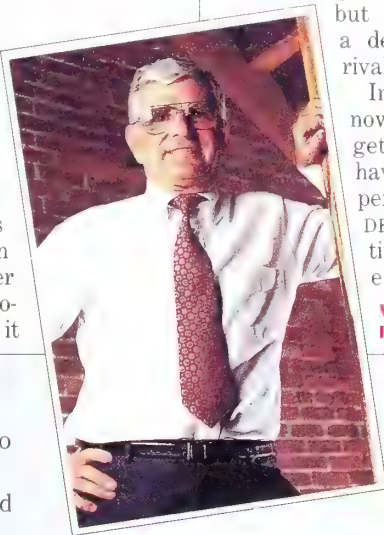
The gravity of the situation became clear on Apr. 9, when it stunned Wall Street with a \$294 million quarterly loss—more than three times what analysts expected. Morgan Stanley & Co. computer analyst Steven Milunovich quickly dubbed it

profitable for another year. By Apr. 22, the stock was trading near its six-year low, around 46, giving it a market value of just \$5.6 billion, a fraction of its record of \$26 billion in 1987.

DEC's problems are hardly unique. Other old-line computer makers such as IBM and Unisys Corp. are also struggling to slim down, speed up, and adapt to a world of inexpensive commodity hardware and slim margins. But DEC clearly trails in its response. At the root of its problems: a "matrix" management system of interlocking and overlapping committees. The practice once rated raves from management gurus for flexibility but now has devolved into a debilitating mishmash of rivalries.

Indeed, for three years now, Olsen's attempts to get DEC back on course have kept the company in a perpetual state of flux—DEC has reorganized three times since 1988. As top engineering, sales, and

VICE-PRESIDENT SMITH'S INFLUENCE HAS WANED



AL COMPUTERS

biggest flop. It got into the 802 but missed the compatibility boat. Tried to find a market, Olivetti, and, with mixed results. To build its own PCs in the 80s—a risky move

THE hill's heel. By the time engineers' decisions, DEC never did well—which was a serious shortcoming in a market for computer software that was hot

MANAGEMENT

Heavy turnover at the top—especially among heirs—was apparent. DEC has neither a chief financial officer nor a chief technologist. Frequent reorganizations, including one now under way, have increased internal tensions, hurt *esprit de corps*, and prompted resignations

marketing managers were shunted from assignment to assignment, the company lost its sense of overall direction. "DEC's competitors," says Milunovich, "view the company like Wile E. Coyote views the Road Runner—as lunch."

Even DEC's share of its core minicomputer market has dropped, while IBM's has jumped from 17% to 28% since 1988. And attempts to push the 15-year-old

VAX into major new markets have flopped. A mainframe version of VAX, introduced in late 1989, was once expected to add as much as \$2 billion to annual revenues. In the most recent quarter, it contributed a paltry \$30 million. In "fault-tolerant" computers designed to keep running during component failures, DEC hoped to catapult past market leader Tandem Computer Inc. But it has won just 3% of that business. Both efforts were hamstrung by DEC's failure to choose a single software strategy.

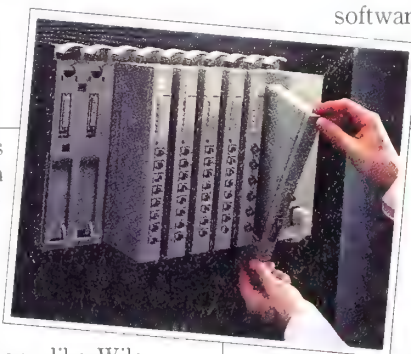
HERO WORSHIP. Pitting executives and development groups against one another is vintage Olsen—and a byproduct of the company's matrix management system. A brilliant engineer himself, Olsen has often created rival teams to race one another. The winning team would see its design come to life, and its leader would often emerge as a major influence on Olsen and DEC's strategy—at least for a while. "Ken operates on heroes," says Kurt L. Friedrich, a former DEC software manager who recently joined Hewlett-Packard Co. "He's always looking for someone who has the next great vision." As a result, "the company is

MAINFRAME COMPUTING

DEC jumped into the mainframe software market in 1988, to swipe IBM's customers. But flip-flops confused buyers, who stuck with Big Blue

MINICOMPUTERS

DEC's VAX line is its flagship. But the technology is aging, and DEC needs new machines. The successor won't be out until 1993



SOFTWARE

Constant changes in software strategy have confused customers and developers. Alliance *du jour*: a link to software powerhouse Microsoft

WORKSTATIONS

DEC has waffled for years over technologies but is now set to sell machines using its own 'Alpha' processor. The chip is fast but requires new software—and rivals are closing the gap

DATA BW

quarter from hell." A week later, Sam D. Strecker, chief technical officer since 1985, and two other engineering-presidents were stripped of their jobs. That came close on the heels of predictions by the chief financial officer, a top marketing executive, and a senior executive in the personal-computer business. Olsen says there is no pattern in these departures, but investors see it as a sign that DEC is losing the managers it needs to turn itself around. Analysts now say that even with drastic cuts—including slashing 7,000 people last quarter—the company might not be

THE DEC SERVER 901: NETWORKING IS A KEY

fraught with changing faces in strategy," maintains Armando Stettner, a former DEC engineer.

In the past, the system of serial heroes and competing groups served DEC well. The company avoided the catastrophes that befell Wang Laboratories Inc. and Prime Computer Inc. when they bet too heavily on research and development efforts that failed. At its best, Olsen's system

Top of the News

produced a flood of products that propelled DEC from \$1 billion in revenues to \$12.7 billion from 1977 to 1989.

But the DEC system seems like an anachronism now. When the industry was growing fast and product cycles were relatively slow, there was time to see which design would win out. These days, time is a luxury computer makers can no longer afford.

Take DEC's approach to RISC (reduced instruction-set computing). This new

just delayed ordering a \$500,000 VAX so it can buy an Alpha next year.

What worries investors most is the possibility that chaos within DEC's management might derail Alpha. "They appear to be mismanaging the product transition," says Daniel H. Szente, assistant director for investments for the Ohio State Teachers Retirement System, which holds two million DEC shares.

If DEC fumbles with Alpha, it may be because all those years of competing

marketing manager who's now vice-president for software-product marketing. Sun: "The DEC model is two runners who, when the starting pistol goes, spend the first 10 seconds beating each other up. The winner is the one who limps across the line." Vice-President of Operations John F. Smith, whose influence at DEC was curtailed this year in reorganization, plays down the infighting: "From the standpoint of friction between business units, I don't believe there is a problem."

The contention between Olsen and Olsen's decisiveness has also made it difficult for DEC to make deep cost cuts, needs to return to profitability. "There are people doing things in order to protect their jobs," says an executive at a DEC supplier. Despite a three-year effort to slim down, DEC now has just 10,000 fewer workers than the peak of 126,000 in 1990. That's partly because of its buyout of Philips' minicomputer business last year, which added 7,000 employees. It

FOR THE FIRST TIME, DEC'S SALES FORCE HAS BEEN GIVEN STRICT ORDERS TO INVITE ONLY REAL PROSPECTS TO DECWORLD



chip technology allowed companies such as Sun Microsystems Inc. to build speedy workstations that have been stealing sales from VAX for years. Olsen finally gave the go-ahead in 1987 for Digital's engineers to create their own RISC chip. In typical fashion, in 1988 he also approved a separate effort to develop a RISC workstation using chips from MIPS Computers Systems Inc., and killed the in-house effort. Now, DEC has reversed again: It's backing away from MIPS and pushing Alpha, its own RISC design. The upshot of DEC's zigzags: It holds just 13% of the market.

RISC BUSINESS. DEC's latest RISC effort, code-named Alpha, is the key to the company's future (page 33). DEC says the new design not only will give the company a top-performing workstation but also will allow it to replace the aging VAX line. But the first Alpha machines won't be out until early 1993.

Today, that means Alpha is actually doing more harm than good: Customers are reluctant to buy the MIPS-based workstations and, in some cases, VAXes—figuring they'll do better by waiting. ISA Consultants Ltd., a Chicago computer-service company, for instance,

product teams and strategy shifts have driven many talented people from the company. "In DEC, when a project goes down, you go down, and you go down for the count," says Edward B. Roberts, a professor at Massachusetts Institute of Technology. So former DEC managers whose projects were canceled or curtailed—often by Olsen—now are working for competitors.

With the prospect of continuing layoffs and budget cuts, the *esprit de corps* that once smoothed over the conflicts between groups has been replaced by intense rivalries. Managers lock horns over resources such as sales or support help, and negotiate political mine fields to do business.

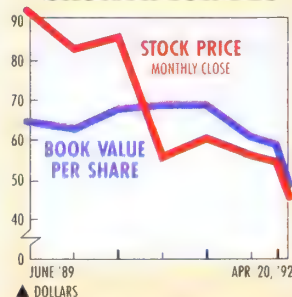
DEC's fledgling disk-drive sales team is a good example. That group recently found itself fighting for a customer against a distributor that DEC's own disk-manufacturing arm had hired. Says Jim Billmaier, a former DEC

now stands out as a high-cost producer with sales per employee of just \$115,000 compared with \$175,000 at Big Blue and \$275,000 at Sun.

'DISTINCT STRATEGIES.' Olsen says the company is making an effort to keep costs under control. The upshot? Another reorganization. Its thrust is to reduce the array of products that DEC sells, speed new ones to market by combining engineering and marketing into the same business units. Just three years ago, Olsen took the opposite tack, splitting marketing and engineering.

If the reorganizations seem to be coming up, it's because Olsen is not satisfied. "We're not here to keep things going the way they always went," he says. And if analysts think the company is zigzagging, they're missing the point. "We have a number of different strategies in different areas, and they've got to fit together," Olsen explains. Even now, Olsen

INVESTORS SEE LITTLE GROWTH FOR DEC



DATA: COMPANY REPORTS, ALEX BROWN & SONS

s not to be dismissed out of hand. In the late 1960s, he guided DEC through changing technology and management turmoil to make it king of the minis. In the early 1980s, he toughed out fall from a failed push into the crucial PC market and a disastrous bookkeeping error that resulted in lost orders. Instead, focused on exploiting the VAX's working strengths over IBM's various

incompatible computer lines. That led to DEC's greatest growth spurt, and networking server products are still among its strongest sellers.

To Olsen, DEC is simply in the midst of another cyclical downturn. He says he's not considering stepping aside—or altering his modus operandi. As he has done in the past, he plans to rely on DEC's vast cash resources to see it through.

Even after last year's \$617 million loss, DEC still has \$1.5 billion on hand.

And because Olsen has handpicked its members, DEC's board isn't about to mount an insider coup, à la General Motors Corp. But with so many lieutenants gone or sidelined, it's Olsen alone who will be to blame for DEC's decline—unless he makes a magical comeback.

By Gary McWilliams in Boston

WILL ALPHA MARK A NEW BEGINNING FOR DEC?

In the 1970s and '80s, Digital Equipment Corp. was the world's top minicomputer company. Then, late in the '80s, DEC found its sales stalling under pressure from powerful desktop workstations, against which DEC's aging VAX computer design couldn't compete. So, the company set to work on a product that would impress its customers and keep them loyal.

The result is Alpha, an all-new design introduced in February. Promoted as the foundation for DEC's most important future computers—workstations to mainframe-class machines—the technology is designed to sustain DEC for 25 years. At the heart of Alpha is the latest in computer design—reduced instruction-set computing (RISC). That's a way of designing computers so they can crunch information very quickly, by reducing the number of commands needed to complete a task. Alpha is at the peak of the RISC performance curve.

Indeed, at first blush, the new microprocessors look promising hot. DEC says the chips will add through 150 million instructions per second (MIPS), vs. the competition's processors, which today run in the 25-8-MIPS range. What's more, Alpha chips will attack 64 bits of data at a time, not the 32 bits most RISC processors handle today.

W SLOG. Already, the new computer family has gained customers' attention. Last year, Raymond V. Sasso, chief information officer at J.R. Simco, ruled out buying any more minis. But with Alpha, he says, stands a chance of selling Simplot RISC machines it now prefers.

At the same time, Alpha can't turn its sagging fortunes around overnight. The first Alpha-based computers won't be due out in volume until early 1993, which could give competitors a chance to match Alpha's performance.

And those early models will be pricey minicomputer-class systems, not cheap workstations that DEC can use to stave off workstation leaders Sun Microsystems Inc. and Hewlett-Packard Co.

Moreover, Alpha's super number-crunching power doesn't help customers unless they can run their software on the computers. And DEC must catch up with software designed for Alpha. That gives Sun and HP a big advantage: They have been shipping their RISC-based computers for several

applications, such as spreadsheet and word processing programs, to run on Alpha-based computers.

Microsoft's backing should help DEC with another challenge: persuading other computer companies to use Alpha in their machines. That's a must for DEC's bottom line, since it will help offset the tremendous costs required to keep a computer architecture such as Alpha up to date over time. DEC, for instance, has begun work on a \$500 million plant to manufacture Alpha

chips. So far, DEC has signed up supercomputer leader Cray Research Inc., which plans to build a so-called massively parallel computer that will gang together hundreds of chips to tackle big scientific problems using Alpha technology. Another Alpha licensee: Japanese workstation maker Kubota Pacific Computer Inc.

CENTER STAGE. For now, Alpha is more paper tiger than killer chip: "I don't believe Alpha will be a factor in the marketplace until the 1994 to 1995 time frame," says

HP Vice-President Willem P. Roelandts.

That means DEC's VAX will remain at center stage for some time. And in the meantime, the Alpha hoopla is denting VAX sales, which fell more than 20% last quarter, partly because customers are worried Alpha will make the VAX obsolete. "People do not want to buy the old technology, so they're waiting," explains Howard L. Niden, Chicago regional director for Price Waterhouse.

Here's Alpha's ultimate challenge: Capturing customers beyond the current installed base of 500,000 VAXes. As First Boston Corp. analyst Curt Rohrman puts it: "It's hard to grow your company if you don't bring new people into the fold." Indeed, for DEC, that's just about the Alpha and the omega of the situation.

By Gary McWilliams in Boston, with Robert D. Hof in San Francisco



years, and there are sizable software libraries that work on the machines.

To solve the problem, DEC says it will provide customers with a smorgasbord of services and programming tools to smooth their transition between VAX and Alpha. And DEC also will make Alpha run Microsoft Corp.'s Windows NT operating system, a core program that's expected to attract lots of attention from the PC software market. Indeed, on Apr. 24, Microsoft will disclose plans to convert its own PC

DEC says Alpha machines will whiz past rivals—but they could lose their lead by the time they hit the market



SEYMOUR CRAY'S SUPERCOMPUTER IS FOUR YEARS LATE, AND ANOTHER YEAR FROM RELEASE

THE PROBLEM EVEN A CRAY 3 COULDN'T SOLVE

Cray Computer has no orders, no product—and now, no CEO

Is the curtain about to fall on supercomputer genius Seymour R. Cray? In December, Lawrence Livermore National Laboratory, tired of delays, canceled Cray Computer Corp.'s one and only order for a Cray 3 supercomputer. Then, on Apr. 16, Neil Davenport, the company's president and chief executive, up and quit. With no sales, no orders on hand, no working prototype, and no CEO, Cray Computer's short run looks as if it's about finished.

"This is the death rattle," says one major supercomputer buyer, reacting to Davenport's departure. Technically, with \$50 million in the bank, Cray has the resources to survive another 12 months or so. But its Cray 3 supercomputer, delayed at least four years, is now so late that once it finally appears, it's likely to be seen as an outmoded machine—with a \$30 million price tag.

'UNDEREMPLOYED.' Long revered as the father of the supercomputer, Chairman Cray now finds himself in an awkward predicament. He has always admitted that he's short on people skills. Now, he is fully in charge at Cray

Computer—the company he founded three years ago after leaving Cray Research Inc. That means he will have to turn his attention from getting the Cray 3 out the door to such mundane tasks as finding a new CEO and hunting for customers. News of Davenport's resignation drove Cray Computer stock down almost 20%, to 4—a far cry from its high of 19½ last October.

It's not clear why Davenport resigned, and neither he nor Cray returned phone calls. But Jeffery Canin, an analyst at

Montgomery Securities, which unwrote Cray Computer's 1991 stock offering, spoke with Davenport. According to Canin, Davenport says the decision to leave was his own. "He was itching to be more fully employed," says Canin. "Since he didn't have a product to sell, he felt underemployed."

Davenport might also have been worried he would never have a machine to sell. Cray had planned to make the Cray 3 the world's speediest computer by using an exotic circuit material called gallium arsenide, which can run three times as fast as silicon chips. But manufacturing such processors proved far more difficult than Cray had figured, requiring deft machining by finely crafted miniature robots. Now, after total development investment of nearly \$350 million, a full-blown Cray 3 is still as much a year from release.

LAB ANIMAL. In the past, customers might have waited patiently for a machine designed by Seymour Cray. More. While Cray Computer struggled to produce a fully configured 16-processor Cray 3, competitor Cray Research already has seven orders for its YC90, a comparable 16-processor machine due to ship soon. Cray Computer will have to drum up cash by selling a 4-processor version of the Cray 3, assuming it can get one working. But the company may have trouble attracting buyers for such a machine, given its track record. With no revenues from the Cray 3 coming in, Seymour Cray's plan to wow the world in the mid-1990s with a 64-processor Cray 4 looks doubtful.

Probably even more disturbing to Cray is the popular notion that his computer designs are no longer the leading edge. The new wave in heavy-duty computing, called massively parallel computing, splits problems over hundreds of thousands of microprocessors linked in a network. Seymour Cray has had to plans to work within this technology. The approach, "not as creative or as interesting as what I'm doing," he has said.

It's not likely that Seymour Cray is interested in his management duties. On May 12, at Cray Computer's annual meeting at Colorado Springs' Antlers Doubletree Hotel, Cray is scheduled to lay out a survival strategy for his company. Chances are his plan has him turning his problems over to a new manager fast—so he can get back to the labs.

By Russell Mitchell in San Francisco

CRAY COMPUTER'S SAGA

OCTOBER, 1983 Cray 3 supercomputer project is launched at Cray Research. Production set for 1988

MAY, 1989 Cray 3 project is set to be spun off into a separate company. The new Cray Computer Corp. is led by Cray Research founder Seymour Cray. Already a year late, Cray 3 hits more snags, with production now planned for winter, 1990

APRIL, 1990 Schedule slips again; Cray 3 now due winter, 1991

JUNE, 1991 New stock issue raises \$61 million. Shares initially traded at \$12.50

DECEMBER, 1991 Tired of delays, Lawrence Livermore national lab, Cray Computer's only customer, cancels its order

APRIL, 1992 CEO Neil Davenport resigns. Bereft of customers, reclusive Seymour Cray plans to announce company's strategy at May 12 annual meeting. Stock trades around \$4 a share

DATA: BIR

TOOTH-AND-NAIL FIGHT OVER PLASTICS

Battelle says Du Pont misused their joint research on biodegradables

Biodegradable plastics haven't made much of a name for themselves. Since it takes decades for things to degrade in a landfill, calling something "biodegradable" doesn't really mean much—particularly not in the products are petroleum-based plastics. Some plastic-product makers tried adding starch to their wares, which causes them to disintegrate once they're exposed to the elements. But those often leave a plastic dust when they break down. To the contrary, such problems have damned plastic for good. "My 5-year-old nephew said, 'There's no such thing as biodegradable plastics,'" says a researcher at a big company trying to commercialize such products.

His nephew may be technically correct, but not necessarily so. Indeed, researchers across the country are furiously racing to develop affordable biodegradable and compostable plastic. These days, the pace is so intense and the stakes so high that one report of all that work is a criminal lawsuit. Battelle Memorial Institute, the Columbus, Ohio, nonprofit research giant, claims in a recently filed suit that Du Pont Co. deliberately misappropriated Battelle's trade secrets during a joint-research project in biodegradable plastics. "What we did not expect to have patents issued in their name is what we believe to be our inventions," says Richard Razgaitis, vice-president for commercial development of Battelle's Columbus operations.

THE MARKET. Battelle doesn't often sue partners—its lifeblood is contract research for such companies as Du Pont. In the past five years, Razgaitis says, Battelle has been involved in just "three or four" intellectual-property disputes, "nothing in that history as significant as this." The pending suit, filed in 1990 in U.S. District Court in Columbus, Ohio, highlights what's at stake. A low-cost version of biodegradable plastic would be worth "billions of dollars in

the U.S. alone," Battelle's suit claims.

At the heart of the two companies' legal battle are polylactides, a class of materials both have researched for years. Du Pont says Wallace H. Carothers, the company scientist who invented nylon, discovered polylactide polymers back in the '30s. In 1988, Battelle says, it told Du Pont about its work in the area under a 20-year confidentiality agreement. Du Pont liked what it heard and took an option to acquire an exclusive license on the polylactide research.

Unlike petroleum-based plastics, polylactides actually degrade naturally.

The two set to work on further research. Du Pont says it paid \$3.5 million to help fund the work. But by May, 1990, relations between Du Pont and Battelle became strained over negotiations for an exclusive license. The Battelle suit says Du Pont "ceased to negotiate in good faith." Charles E. Krukiel, senior counsel for Du Pont Chemicals, says "the figures that Battelle was trying to get us to agree to weren't equivalent to the proprietary contribution they made."

Before their relationship came to its end, Du Pont set up a venture with ConAgra Inc., the food giant, called Ecological Chemical Products Co. The deal was aimed at commercializing Du Pont's research in the field.

NO APOLOGIES. Battelle, meanwhile, hooked up with an Adolph Coors Co. unit called Golden Technologies Co., the brewer's in-house new-business incubator. The company hoped the partnership would allow it to sell its work to commercial buyers.

What finally sparked the suit, though, were decisions by the U.S. Patent Office. In May, 1990, as negotiations with Battelle were breaking down, Du Pont had applied for its own patents on the technology and ultimately won a number of them. Battelle now says Du Pont used Battelle technology to win the patents. Battelle's own patent applications are still pending.

But Du Pont denies the charges. "The interesting thing is, we've not seen any patents

granted to Battelle in this area," says Krukiel. "Our conclusion is that they didn't have any inventions that were patentable," says Krukiel.

Battelle has taken a kitchen-sink approach with its suit, making 14 different claims. In the end, it wants Du Pont's four patents and ownership of all the technology developed under the option agreement assigned to Battelle. The research outfit also wants unspecified compensatory and punitive damages. Du Pont is to file its formal reply by June 1, and so far, no settlement discussions have been held.

While the two duke it out in the courts, research goes on. Soon, biodegradable plastics may be so common they become politically correct.

By Zachary Schiller in Cleveland and Janet Bamford in Philadelphia, with bureau reports

EXPERIMENTERS IN ECOTRASH —AND SOME POTENTIAL USES

- WARNER-LAMBERT**
Making starch-based plastics that fully break down
- ECOCHEM**
Testing plastic made from cheese whey and corn
- ICI**
Selling a moisture-resistant, biodegradable plastic made from natural feedstock
- AIR PRODUCTS & CHEMICALS**
Selling a water-soluble, compostable plastic



Du Pont, in fact, uses the material to make surgical sutures. But the material is expensive to produce. So Battelle's work had focused on reducing the costs of producing polylactides. In 1988, Battelle told Du Pont it had made advances toward manufacturing polylactides cost-effectively—which would make the material perfect for plastics buyers, such as food packagers, paper-plate makers, and fast-food restaurants.

Both companies have
worked on this plastic for
years. It's unique:
It actually degrades

AFTER CAT: WHAT DOES THE RIGHT TO STRIKE MEAN NOW?

Two views on a bill banning companies from hiring replacements

The United Auto Workers, perhaps the country's strongest union, barely had tapped its \$800 million strike fund six months into its Caterpillar Inc. walk-out. Yet the union collapsed like a house of cards within days of Cat's threat to hire permanent replacements for strikers who didn't return to work on the company's terms. The recent showdown and its denouement raise a

intervention on the side of the unions.

BERNSTEIN: The bill in Congress doesn't stop management from hiring replacements. It only says that a company can't promise them a permanent job. Most companies weren't doing that when the Wagner Act, our basic labor law, was written in 1935. It's based on the notion that the right to bargain collectively exists only if workers can't be fired for striking. Permanently replacing striking workers, which became a widespread practice during the 1980s, is no different than firing them. By not banning the tactic, the courts and Congress have indeed intervened in the bargaining process—on management's side. It's denying workers the right to strike.

WILDSTROM: There's more at stake here than rights. Corporations competing in a global economy—such as Caterpillar—need a better way to settle labor disputes than a war of attrition with their own workers. After the UAW had

itself had taken this approach for years. Then it abruptly reversed course and tackled the UAW head-on. What's more, it did so without ever providing a convincing explanation for how, if productivity is included, its unit labor costs are higher than Komatsu's, management asserts.

WILDSTROM: No one wants Third World wages. But as you point out, competitiveness isn't just a question of pay, it's a matter of productivity. And that means realistic work rules—these days, that's as big a bargaining issue as pay. If management is going to pay skilled workers high wages, it needs the flexibility to use them as efficiently as possible. Often this means reorganizing the work force into modern, high-performance teams.

BERNSTEIN: But the purpose of abolishing or amending work rules is not simply to gain flexibility in the manufacturing process. Team production systems depend on gaining workers' cooperation, tapping their knowledge of their jobs, and encouraging them to figure out how to work faster and smarter. You don't want that kind of performance by threatening people with permanent job loss. Caterpillar's hard-nosed obsession with labor costs probably has set back its plant-level productivity effort by years.



central question about labor relations today: Does the right to strike mean anything anymore?

Unions argue that management's ability to replace strikers permanently is crippling them. They support pending federal legislation that would ban the hiring of permanent replacements. Below, *BUSINESS WEEK* Washington Senior News Editor Stephen H. Wildstrom and Workplace Editor Aaron Bernstein debate the question raised by the Cat dispute: Should companies be permitted to hire permanent replacements?

WILDSTROM: Yes. A central tenet of U.S. labor law is that the government should remain neutral in collective bargaining. Obviously, the government should enforce the law by ensuring that workers have the right to form unions and bargain collectively. But taking the freedom to hire permanent replacements away from management would be uncalled-for

been on strike for six months, the company found itself facing a Hobson's choice: Accept the union's demands—and therefore pay wages that would impair the company's ability to compete against Komatsu Ltd., its primary rival—or leave the production lines shut down and watch customers slip away, perhaps forever. Ending the strike while keeping its unionized labor costs in line was vital to Cat's international competitiveness.

BERNSTEIN: It's a big mistake to think that competitiveness is simply about labor costs. That's a game the U.S. can never win, unless we want to lower our living standards to Third World levels. U.S. companies should leverage off the high skills of their workers to beat rivals on productivity and quality. Caterpillar



WILDSTROM: True, a hangdog work force could turn Cat's victory into a Pyrrhic one in the long run. But, you're basically suggesting that the walkout was a win-win proposition for both sides. That raises the question of whether strikes have become obsolete as a bargaining tactic in today's economy. The UAW's capitulation to Cat suggests just that. Unions must find new ways to press

case. Mediation, and in some cases arbitration, may be a substitute. Persuading consumers to vote with their pocket through an industry campaign or boycott may be an alternative. And in global markets, industrial unions, which have mouthed the rhetoric of international worker solidarity, might seek ways to cooperate with their brethren who face similar problems in other countries.

BERNSTEIN: The best tactic for both U.S. managers and workers is cooperative work teams. But management is usually a bigger obstacle than labor to the cooperation this entails. Although too many unions remain reactive and unwilling to change the way they work, most of them increasingly realize that cooperation is vital if U.S. companies are going to compete globally. However, most of U.S.

management is viscerally antiunion. And that animus leads managers to work against their own goal of higher productivity. Instead of fostering modern, cooperative work systems, many managers have realized that they can use permanent replacements to attack unions. That hurts our international competitiveness—which is why permanent replacements should be illegal.

BANKRUPTCIES

ORION IS STILL FAR-CROSSED

Creditors have dashed the studio's hopes of sliding out of Chapter 11

odie Foster's portrayal of a steely rookie Federal Bureau of Investigation agent in *The Silence of the Lambs* won her an Academy Award. But Orion Pictures Corp., the film's sole distributor, is finding out that the actress can be every bit as steely as Foster from the silver screen when it comes to high finance.

On Apr. 21, a whole slew of Hollywood personalities, including Foster, actor Kevin Costner, and *Lambs* director Jonathan Demme (table), plus a long list of other unsecured creditors, rejected a proposed plan out of Orion by independent studio New Line Cinema Inc. The deal, now all but dead, might have rescued Orion, which was forced last December into Chapter 11 bankruptcy proceedings.

In the end, this company is worth more than they are willing to give us," says Arthur L. Ross Jr., senior managing director of Rothschild Inc. and unsecured creditors' adviser. "We thought we might have had a deal last week," notes New Line President Michael Lynne, who says his company deems significant increases" to its offer but it was rejected.

BIDDERS. The proposal, made jointly by John W. Kluge, Orion's majority shareholder, and New Line, included a buyout of the studio, notes, and stock valued between \$100 million and \$90 million. But insiders say the offer didn't guarantee the elaborate deals under which many of the studio's actors, writers, and directors work. "It was a very complex issue that involved more than just the usual payments," says Keith McCay, an accountant who works with Costner's TIG Productions Inc. "There was the issue of permanent replacements." Orion's unsecured creditors have long

been a thorn in the studio's side. Indeed, it was the breakdown of restructuring talks with the unsecured creditors—which include bondholders, advertising agencies, film-processing labs, and even the Hollywood trade association—that helped push Orion into bankruptcy proceedings in the first place.



SO LONG, WOODY: *SHADOWS AND FOG* WILL BE HIS LAST FOR ORION

Now, the collapse of the New Line talks could lead to the studio's liquidation, though Ross says he has been contacted by several possible bidders. Only one, four-month-old Savoy Pictures Entertainment Inc., has so far stepped forward. Savoy, launched by former Columbia Pictures Entertainment Inc.

Chairman Victor A. Kaufman and longtime partner Lewis J. Korman, has offered to pay Orion's bondholders and unsecured creditors an estimated \$175 million in Savoy stock. The way such a deal has been sketched by Savoy, Orion's creditors would share up to \$400 million in future cash payments, based on the sale of assets. Kaufman won't discuss his bid. But others say television producer Republic Pictures Corp., among others, also is interested in cutting a deal for Orion and may soon join in the bidding.

OLDIES BUT GOODIES. Whoever wins Orion doesn't figure to be getting a whole lot. Since its bankruptcy filing, most of management has quit, including the studio's chief executive, William Bernstein. An eventual blockbuster, *The Addams Family*, was sold to Paramount Pictures Corp. for \$14.6 million. Worse, big-name talent has been bailing out: Director Woody Allen made films for Orion for 15 years. But his latest, *Shadows and Fog*, will be his last. Allen's next movie will be done with Tri-Star Pictures Inc.

So what does Orion, with its debt of \$165 million, actually have to offer a buyer? The company's films generated more than \$500 million in 1991 revenues, and its library contains such marketable hits as *Back to School* and *Platoon*. The studio has nearly a dozen films completed, including the upcoming *Car 54, Where Are You?* and *Robocop 3*. And "they still have the rights to a lot of projects, sequels, and the like," says Kaufman, who has lined up such heavy-hitting financial backers as the Pritzker family of Chicago and New York investment banker Herbert Allen.

One of the sequels in Orion's stable is *Bull Durham 2*. But to make it, Orion probably needs to re-sign the film's star, Kevin Costner. In the old days, that might have been easy: Orion, after all, helped finance Costner's *Dances with Wolves*. But these days, Costner isn't likely to cut Orion any slack. Even Academy Award winners like to see the money they're due.

By Ronald Grover in Los Angeles

ORION'S TINSELTOWN CREDITORS

Thousands of dollars		
ISMAIL MERCHANT	Producer	\$3,900
KEVIN COSTNER	Actor	3,000
JONATHAN DEMME	Director	1,000
TED FIELD	Producer	800
ALEC BALDWIN	Actor	454
AARON RUSSO	Producer	375

DATA: ORION PICTURES CORP. BANKRUPTCY FILING



COLD CASH: INVESTORS RESPONDED TO THE BANK'S HAPPY NEWS BY PURCHASING EVERY SHARE IN SIGHT

WELLS FARGO & CO.

- ▶ Earnings per share: \$2.09
- ▶ Expected earnings: \$1.22
- ▶ Tight cost-controls offset continuing problems in California real estate
- ▶ Wells shares rose 9 7/8, to close at 76 1/8 on Apr. 21

BRACE YOURSELF—QUARTERLY EARNINGS AREN'T HALF BAD

Contrary to predictions, the profits reported so far are decidedly upbeat

If you're feeling malicious and want to cause a panic, just stand in the middle of Wall Street and shout: "Surprise!" For the past two years, that word usually has been preceded by the dread phrase "negative earnings"—Wallspeak for profits that aren't up to snuff. Depending on how far the actual profits come in below expectations, a stock can go into a tailspin.

Now, here's a real surprise: The first-quarter profits reported so far are decidedly upbeat. They're not barn-burners—in many cases, they are still below last year's first-quarter returns. Compared with expectations, however, the results are good across a broad swath of industries: banks, chemicals, forest products, publishing, railroads, and telecommunications.

When all the first-quarter profits are tallied, says Steven G. Einhorn, co-chairman of

the investment-policy committee at Goldman Sachs & Co., they should show a 5% rise for the companies in Standard & Poor's 500-stock index. That may not sound like much, but he says it sets the stage for an acceleration of profits that should average out to about 15% growth for the year. That's good news for a stock market that has climbed 40% over the past 18 months on falling interest rates and hopes—just hopes, until now—for higher corporate profits. Now that

rates have stopped falling, it's essential for earnings to start moving up if the market is to hold on to its gains, or even move higher.

Big, positive earnings surprises can be awfully bullish for the stocks of companies announcing the happy news. Look at Wells Fargo & Co.: On Apr. 21, the California banking giant unveiled first-quarter earnings of \$2.09 a share, up from \$2.86 for 1991's first quarter. But the consensus forecast of analysts who followed the bank was just \$1.22 a share.

CHEAP INK. Over the next two days, investors reacted to the bank's news by buying every share in sight, to lift the stock more than 20%, to 79 3/4. Thanks to lower interest rates and loan-loss charges, profit reports from Chase Manhattan, Chemical Banking, NationsBank and even beleaguered Citicorp were better than expected, though less dramatic.

Companies that have delivered better-than-expected profits have done so largely by cutting costs to bring margins up and revenues to the bottom line. "All the talk about lean and mean is starting to pay off," says Melissa R. Brown, director of quantitative research at Prudential Securities Inc. It could be better: The economy was too weak to provide

STORAGE TECHNOLOGY CORP.

- ▶ Earnings per share: 30¢
- ▶ Expected earnings: 48¢
- ▶ Testing delays for company's new mainframe disk drive hurt profits
- ▶ Shares fell 10 7/8, to close at 45 3/8 on Apr. 21

DATA: BRIDGE INFORMATION SYSTEMS INC., BW



CEO POPPA: A NASTY SURPRISE

h top-line growth. And large multi-nationals have had to struggle, too, with economic slowdowns in Europe and Japan and a generally rising dollar, which has hurt overseas profits.

Cost-cutting has even aided companies as the market had all but given up on IBM. It eked out a better-than-forecast earnings gain on a slim 3% increase in revenues. Other companies boasting improved margins included Hilton Hotels, Honeywell, and Panhandle Petroleum. Newspaper publisher Knight-Ridder Inc. saved enough on lower interest rates and cheaper newsprint and ink to turn a \$10 million revenue increase into a \$9.1 million gain in profits. "That's extraordinary," says Stefan D. Abrams, investment strategist for Kidder, Peabody & Co. "The degree of operating leverage in these companies is going to rise a lot of people."

BLUE PIE. The market hasn't gone all in and is fuzzy, though. Companies are springing the wrong kind of surprise and getting no mercy. Shares of Storage Technology Corp. dropped 10%, or 1/2%, on Apr. 21 after earnings of 48¢ a share fell short of analysts' 48¢ forecast. Then, CEO Ryal Poppa jeopardized full-year estimates by disclosing the company is behind schedule on its new disk drive—dubbed Iceberg—for microframes.

Good news or bad, the spring report-season should teach Wall Street analysts a lesson in humility. Only days before first-quarter reporting got under way, Benjamin Zacks of forecast compiler Zacks Investment Research feared Wall Street was in for another rout: nearly all the analysts' revisions were downward. But to date, about 63% of the companies reporting first-quarter profits met or exceeded forecasts. Zacks expects about half the first-quarter reports expecting are already in, enough to suggest that the positive surprises will be on coming.

That's just the ticket for a market that was looking pricey relative to earnings. Few see the first quarter's profits strong enough to send stocks much higher—much of the good news is already factored in. Indeed, throughout the first quarter, investors shifted out of cyclical stocks such as Bristol-Myers, Gillette, and Philip Morris and into economically sensitive stocks such as Aluminum Co. of America, Cummins Inc., and Potlatch in anticipation of economic recovery. But at least those invested in the cyclical stocks now have a reason to hang on. Says Lawrence J. Marks of Harbor Capital Management: "In the first quarter, we planted seeds for good earnings." Now, Wall Street will wait to see how that seed grows.

By Jeffrey M. Laderman in New York

A PREVIEW OF FIRST-QUARTER PROFITS

	Sales \$ mil.	% chg. vs. 1991	Profits \$ mil.	% chg. vs. 1991	Margins	
					1992	1991
ABBOTT LABORATORIES	1,877.9	+14	294.2	+16	15.7	15.4
ADVANCED MICRO DEVICES	407.4	+49	84.9	NM	20.8	1.5
ALCOA	2,251.4	-7	76.0	-22	3.4	4.0
AMERICAN CYANAMID	1,378.6	+5	114.8	+10	8.3	8.0
AMOCO	6,384.0	-13	234.0	-52	3.7	6.7
AMR	3,510.0	+27	20.0	NM	0.6	NM
ANHEUSER-BUSCH	2,621.1	+3	224.0	+11	8.5	7.9
APPLE COMPUTER †	1,716.0	+7	135.1	+3	7.9	8.2
AT&T	15,375.0	+1	883.0	+17	5.7	5.0
BELLSOUTH	3,738.7	+6	460.9	+39	12.3	9.4
BLOCKBUSTER ENTERTAINMENT	254.0	+44	25.7	+62	10.1	9.0
BRISTOL-MYERS SQUIBB	2,783.4	+2	547.5	+11	19.7	18.0
CAPITAL CITIES/ABC	1,095.4	-13	41.7	-29	3.8	4.7
CATERPILLAR	2,183.0	-18	-132.0	NM	NM	NM
CBS	1,082.0	+42	18.6	+79	1.7	1.4
CHAMPION INTERNATIONAL	1,200.3	+3	-3.6	NM	NM	1.3
COCA-COLA	2,771.9	+12	383.1	+19	13.8	12.9
COLGATE-PALMOLIVE	1,600.5	+9	113.8	+25	7.1	6.2
CORNING	804.6	+15	77.8	+65	9.7	6.8
DOW CHEMICAL	4,639.0	-6	171.0	-70	3.7	11.7
GENENTECH	117.1	-1	3.5	-82	3.0	16.4
GENERAL DYNAMICS	2,118.0	-1	72.0	+44	3.4	2.3
GENERAL ELECTRIC	13,500.0	+3	1,058.0	+6	7.8	7.6
GEORGIA-PACIFIC	2,830.0	+2	5.0	NM	0.2	NM
GTE	4,823.0	+3	427.0	+117	8.9	4.2
HONEYWELL	1,481.6	+1	116.8	+63	7.9	4.9
IBM	14,037.0	+3	595.0	+7	4.2	4.1
INLAND STEEL	895.9	+8	-27.4	NM	NM	NM
INTEL	1,241.3	+10	184.1	-7	14.8	17.4
INTERNATIONAL PAPER	3,400.0	+10	104.0	-19	3.1	4.1
ITT	5,085.0	+2	163.0	-29	3.2	4.6
KNIGHT-RIDDER	555.4	+2	25.0	+58	4.5	2.9
LILLY (ELI)	1,557.1	+8	442.6	+14	28.4	27.1
LOCKHEED	2,226.0	0	66.0	+22	3.0	2.4
LOTUS DEVELOPMENT	227.1	+30	20.8	+216	9.1	3.8
MARRIOTT	1,953.0	+7	11.0	+10	0.6	0.5
MAYTAG	753.2	+2	28.5	+90	3.8	2.0
MCGRAW-HILL	454.8	+6	14.2	+12	3.1	3.0
MERCK	2,223.4	+9	568.7	+18	25.6	23.6
MERRILL LYNCH	3,414.3	+9	277.5	+53	8.1	5.8
MICROSOFT ††	680.9	+40	178.8	+44	26.3	25.4
MINNESOTA MINING & MFG.	3,406.0	+1	288.0	-4	8.5	8.9
MOBIL	15,151.0	-9	127.0	-82	0.8	4.3
MOTOROLA	3,055.0	+11	127.0	+9	4.2	4.2
NYNEX	3,237.9	-4	336.2	+25	10.4	8.0
PACIFIC TELESIS	2,474.0	+3	331.0	+24	13.4	11.0
PAINWEBBER GROUP	874.3	+19	74.3	+135	8.5	4.3
PFIZER	1,761.3	+4	295.1	+10	16.8	15.8
PHILIP MORRIS	11,854.0	-1	1,099.0	+19	9.3	7.7
POLAROID	431.3	-2	6.2	-62	1.4	3.7
RAYTHEON	2,128.0	-6	143.4	+7	6.7	5.9
REEBOK INTERNATIONAL	797.4	+15	62.3	+7	7.8	8.4
REYNOLDS METALS	1,284.2	-6	13.3	-52	1.0	2.0
SAFeway	3,395.9	0	22.9	-14	0.7	0.8
SCHWAB (CHARLES)	265.0	+42	29.7	+180	11.2	5.7
SEARS, ROEBUCK	13,508.5	+5	321.8	+36	2.4	1.8
SOUTHWESTERN BELL	2,287.1	+7	261.6	+17	11.4	10.4
SPRINT	2,210.0	+2	99.9	+20	4.5	3.9
STORAGE TECHNOLOGY	333.7	-8	12.5	-7	3.7	3.7
TANDY ††	1,085.2	+7	35.1	-4	3.2	3.6
TEXAS INSTRUMENTS	1,694.0	+3	40.0	NM	2.4	NM
TIME WARNER	3,007.0	+6	3.0	NM	0.1	NM
TRW	2,031.0	+6	41.0	+17	2.0	1.8
WELLS FARGO	1,422.0	-7	119.0	-22	8.4	10.0
WESTINGHOUSE ELECTRIC	2,826.0	+2	92.0	-6	3.3	3.5

NM = not meaningful

†Second-quarter results ††Third-quarter results

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

THE BOTTOM LINE: YOU GOTTA HAVE A GIMMICK

This year's annual reports are an eclectic crop. Some even go for candor

Has Francis Fukuyama been moonlighting?

You would almost think so: Many of this year's annual reports read more like *The End of History* than the end of fiscal 1991. In a year marked by the gulf war and the dissolution of the Soviet empire, corporate chieftains couldn't resist tackling the Big Issues. In one example, which mixes Fukuyama's themes with George Bush's speech patterns, Allan E. Murray, CEO of Mobil Corp., says in his letter to shareholders: "It was a topsy-turvy year. Mid-east war. The Soviet Union cracking open. Europe coalescing. U.S. recession lingering. World economies slowing." Oh, and Mobil's earnings flat at \$1.9 billion.

Perhaps it's Corporate America's way of looking on the bright side: Profits were off, dividends too, but, hey, at least we haven't been reduced to a Commonwealth of Independent States. On second thought, scratch that: IBM Chairman John F. Akers spends part of his shareholder letter explaining how his company will soon be a collection of more free-standing units. Does this mean IBM will need separate annual reports?

BICEPS AWAY. What a thought. Companies already print 1.8 reports per shareholder, according to Sid Cato, publisher of *Sid Cato's Newsletter on Annual Reports*. And he says most show few signs of cutting back, despite the poor economy and a wrenching slide in profits. Indeed, to a casual reader of these yearly missives, the apocalyptic tone of 1991 seems to have emboldened rather than inhibited companies.

PepsiCo Inc., for example, put bunnies on the cover of its report. The theme: rapid growth. Marvel Entertainment Group Inc. is celebrating its first year as a public company with a report in the form of a comic book. The company, which was closely held by investor Ronald O. Perelman, has

enlisted superheroes such as Spider-Man and the Incredible Hulk to present Marvel's earnings and outlook. Perelman is making plans to sell stock in Revlon Inc., the cosmetics giant whose ads feature supermodels Cindy Crawford and Claudia Schiffer. So does this mean that next year...? Nah, forget it.

For sheer audacity, look no further than McDonald's Corp., which has chucked the standard format altogether in favor of an elaborate imitation of *The Wall Street Journal*.

Goldome bank got into trouble when it took the same tack three years ago with a *USA Today* knockoff. A *Journal* spokesman says no one will confuse the report with the paper. Still, it mimics *Journal* style right down to the drawings of its top execs.

McDonald's says the format is more accessible to shareholders. Next time, though, it might consider hiring some real *Journal* editors to unravel such artery-hardening passages as this one from an interview with Chairman

Michael R. Quinlan: "The potential for global growth is unlimited. There, the available customer base is vastly underpenetrated."

McDonald's may want its report to look hot off the presses. But Cracker Barrel Old Country Store Inc. is aiming for something more sepia in tone. Based in Lebanon, Tenn., this chain of restaurants and general stores devotes eight pages of its report to the reminiscences

of an unnamed man who grew up in the South. He describes his family as "a joining of the souls, hand in hand, heart in heart, sharing and caring for one another." The company should take a hint from its memoirist: In December, it fired more than 10 gay employees, claiming that homosexuality clashed with its values. Nary a mention

of that in the report, which even has a bag of tomato seeds fixed to the cover.

What annual reports omit often is revealing as what they say. Take Caterpillar Inc. The heavy-equipment manufacturer reports a \$404 million loss in 1991 annual. The loss includes a \$1 million write-down, which the report attributes to plant closings and consolidations. It singles out a plant in York Pa., which Cat says it will close unless becomes "cost competitive." Rather than a strange thing to do with a factory,

had spent \$90 million to modernize.

Cat's report leads out a vital point. Analysts and union leaders say the company was locked in labor negotiations and wanted a separate agreement for the York plant. They say Cat was using the write-down as a lever to get the deal it wanted. Cat denies the charge, though it says until its deal with the union is final, it won't decide

whether to keep the plant open.

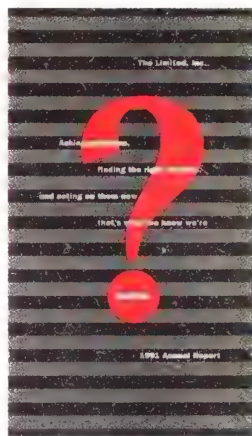
CEO GRILLING. Happily, at least one company seems moved to candor—and the sticky issue of executive compensation, no less. Cypress Semiconductor Corp. prominently lists the paychecks of CEO T. J. Rodgers and his seven top lieutenants in its annual. A table also no-



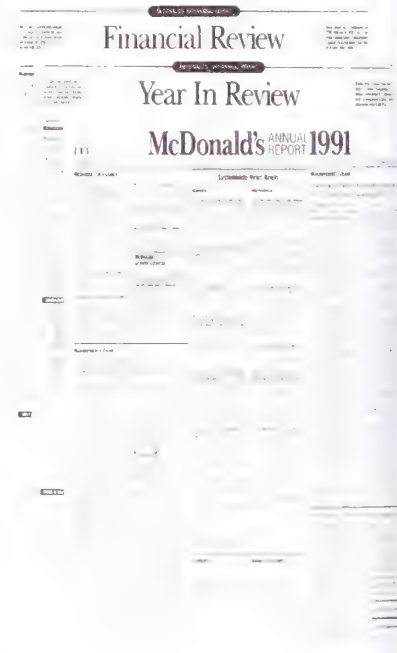
MARVEL: CELEBRATING ITS COMIC-BOOK HERITAGE



CRACKER BARREL: COZY AND MISSING A FEW FACTS



THE LIMITED: A Q&A WITH LESLIE WEXNER



McDONALD'S: AN UNCANNY RESEMBLANCE TO THE WALL STREET JOURNAL

**WE HAVEN'T CHANGED
OUR POSITION ON
WORKERS COMPENSATION
IN OVER 50 YEARS.**

how much Rodgers & Co. made from sales of their Cypress stock. For the record, Rodgers was paid \$241,825 in 1991 and made an additional \$977,270 by selling 60,000 shares. Cato says he has never seen a U.S. annual report like it.

While such candor may be unique, the troubled economy has prompted more companies to give at least the appearance of openness. One popular method is

a Q&A in which the CEO answers questions about the company's profits and prospects. Reading the annual put out by The Limited Inc., you have to admire Chairman Leslie H. Wexner's willingness to submit to an inquisition. The whole report is a barrage of questions from employees to the company's top management. The Limited says it solicited 10,000 queries and chose the toughest

ones. One staffer asks Wexner: "I'm reading about layoffs everywhere. Is my job safe?" His answer: "In a word, yes. But your future depends on you."

O.K., so maybe it was too much to hope all the annual report doubling would wither away in 1991. We'll see that struggle for the rest of history.

By Mark Landler in New York, bureau reports

Commentary/by Paul Magnusson

THIS DESIGN-PROTECTION BILL NEEDS REMODELING

It's tough to argue with the idea. U.S. copyright law, crafted in the 19th century, simply can't protect the work America's industrial designers do today. So why not enact a law to stop the pirates who clone original designs and sell shoddy knockoffs to an unsuspecting public?

That's the concept behind the Design Innovation & Technology Act. With the support of its chief sponsor, Majority Leader Richard A. Gephardt (D-Mo.), as well as Minority Leader Robert H. Michel (R-Ill.), the legislation has been advancing in the House Judiciary Committee. The bill, which would give designers 10 years of patent protection, has gained bipartisan support based on claims that it would restore American jobs and balance trade accounts while rewarding consumers with higher-quality goods at lower prices.

But the Gephardt bill has mutated into something far less benign. Because the measure is so broad and ambiguously worded, what began as an effort to safeguard American designers has instead pitted the makers of autos, trucks, and farm and construction equipment against insurance companies and the independent vehicle-parts industry. The result could mean higher prices for everything that the bill designates as "designed," from furniture to pharmaceuticals to fenders.

'TAIWAN TIN.' Take a look across the Potomac River, at Tony's Auto Service in Alexandria, Va. Owner Tony Damiani fears that the design act would hand a monopoly to carmakers and their original-equipment manufacturers. The last time he priced an electric fuel pump, the local Chrysler dealer wanted \$262. A virtually identical re-



REPAIR-SHOP OWNER DAMIANI FEARS A BIG-THREE MONOPOLY

placement was \$161 at an independent distributor. "This bill would force us to deal only with the dealership," says Damiani.

"Not true," replies Bruce Lehman, the attorney for a lobbying group called the Design Coalition, which drafted much of Gephardt's legislation. Among the members: U.S. auto and truck manufacturers, Caterpillar, furniture makers, the National Association of Manufacturers, the AFL-CIO, and the American Bar Assn. He insists the bill, once properly amended, will specifically exempt generic internal parts for autos and light trucks.

But there's a catch. What the Design Innovation & Technology Act would stop, even its proponents agree, is the flood of "Taiwan tin," inexpensive parts such as fenders, bumpers, and quarter panels that replace originals damaged in collisions. The Big Three and the United Auto Workers—two con-

stituencies long favored by Gephardt—want to see the market controlled by the companies exclusively.

DEEPLY FLAWED. To the US auto insurance industry and consumer groups, that is folly. Clarence M. Ditlow, former patent examiner who now runs the Ralph Nader-founded Center for Automotive Safety, says the auto companies are merely responding to increased competition. "There is no inventiveness in the design of a muffler or a fender," he scoffs. "This is a blatant attempt to eliminate

competition in the marketplace and assess the buyers for the cost."

The design act would be deeply flawed even if internal car and light-truck parts were exempt. Parts for large trucks and farm and construction machinery would still be covered. The

would award original-equipment makers an advantage that only the marketplace should confer. If Tony Damiani stalls shoddy fenders, pumps, he'll lose customers. And if a foundry in Taiwan or Toledo can build a bumper that's as good as Detroit's for half the price, Detroit will lose customers—as it should. If Congress really wants to protect leading-edge design work, it can write a narrowly focused law that won't let U.S. companies hide from competition.

COSTLY PROTECTION

If the design protection bill passes, auto dealers will take replacement-parts business away from parts stores—hurting consumers, if today's prices are any guide



▲ PRICE IN DOLLARS FOR SOME 1982 CHEVROLET CITATION PARTS
DATA: AUTOZONE INC.

LIBERTY MUTUAL LEADER IN WORKERS COMPENSATION SINCE 1936.

Liberty Mutual has been the leading writer of workers compensation for over 50 years.

It's a position we've earned by working with our customers on the issues that matter most: controlling workers compensation costs through innovative loss prevention and effective claims management.

COST REDUCTION THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is analyzing the causes of workplace injuries to improve occupational safety. For our customers, that research means Liberty's 750 local loss prevention specialists provide leading edge safety consultations, including ergonomics and customized safety programs.

COST CONTAINMENT THROUGH CLAIMS MANAGEMENT

When an employee is injured on the job, we apply unmatched experience to provide the most appropriate medical treatment, and return that person to work as soon as possible.

That's because managed care has been our strong suit for decades. We pioneered return to work programs. We have the only rehabilitation center of its kind in the industry. Our groundbreaking program of panel physicians was a forerunner of today's Preferred Provider Organizations (PPOs). Now LibertyPREFERRED CARE is

one of the industry's most effective nationwide PPO networks.

Our medical cost containment programs saved our customers over \$170 million last year.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As the industry's leader, we're working together with our customers and their trade associations, state legislators and labor in the fight for reform. And we'll keep working with them until workers compensation accomplishes its mission: helping injured workers return to work by assuring quality medical care and fast benefit payments.

At the same time, meeting the needs of our customers in difficult states requires innovative solutions. That's why we pioneered a large deductible policy. For self-insured employers, we expanded our Helmsman services with flexible plans.

THE DIRECT WRITING ADVANTAGE

Our leadership position demands a passion for service. As a direct writer, we can more readily provide the service customers need because partnership is built into the way we do business. By working together, we can more effectively control costs.

**LIBERTY
MUTUAL**



FACING THE ISSUES THAT FACE OUR CUSTOMERS

In Business This Week

EDITED BY HARRIS COLLINGWOOD

ENOUGH LAWYERS?

Even some law firms apparently believe there are too many lawyers. The National Association for Law Placement surveyed law schools and law firms around the country and found that firms are conducting fewer on-campus interviews and hiring fewer law graduates in 1991, compared with 1990. Here are the specifics:

Schools reporting fewer spring interviews	73%
Schools reporting a decline in full-time job offers	82%
Firms interviewing at fewer campuses	67%
Firms offering fewer summer jobs	77%
Firms offering fewer full-time jobs	72%

DATA: NATIONAL ASSOCIATION FOR LAW PLACEMENT

AS FARE WARS GET BLOODIER...

► Fair prices—or fare wars? When American Airlines unveiled its four-tier fare structure in early April, it bet that simpler and lower fares would boost revenues by attracting more travelers. But the move may have backfired. Trans World Airlines and USAir retaliated with steep price cuts, and American was forced to lower fares again to remain competitive.

Now, the industry appears headed for an all-out price war. It's hurting already. Citing the implications of increased competition, among other factors, credit-rating agency Standard & Poor's on Apr. 21 put seven carriers, including American parent AMR, on its CreditWatch.

...AIR FRANCE RAILS AT THE U.S.

► And just in case the airlines don't have enough to worry about, a long-simmering dispute between France and the

U.S. is about to boil over. At issue: the number of seats U.S. airlines can offer travelers to and from France. Quietly, France has threatened to scrap its bilateral air treaty with the U.S. unless it is revised. To maintain their share of the booming transatlantic market, the French want to limit U.S. airlines' capacity to France to 150% of state-controlled Air France's. Further, Paris says Air France should be allowed to fly the same U.S.-France routes that U.S. carriers fly, rather than be restricted to just a few destinations.

If the U.S. doesn't respond by May 4, the French say, they may take the first step required to terminate the treaty. U.S. officials aren't saying how they'll respond.

COLLEGE BOUND'S STOCK IS SUSPENDED

► More trouble for College Bound. On Apr. 20, the Securities & Exchange Commission suspended trading in the Florida test-preparation company's stock for 10 days. The SEC cited a lack of adequate current information as well as questions about the accuracy of College Bound's financial statements. College Bound responded that its financial statements were accurate and that the SEC's questions would be resolved in its favor. The company cited the SEC's

THE 'FINETHANKSGOTTARUN' DECADE

Jeff Christian talks to executives all day long, and he has noticed that the way they reply to the question "How are you?" has changed. It used to be that the answer would pertain to the state of business: Fine, not-so-good, kinda slow, pretty busy. Now, the answer is always about time, or the lack of it.

"Everybody I talk to says they're crazed, things are very intense, they don't have enough time to do their jobs," says Cleveland-based executive recruiter. "I think it's a result of corporate downsizing: Fewer people are doing more work. But weren't the '90s supposed to be a break from the workaholic '80s? 'Yes, but wanting more relaxation time is creating more pressure.' Oh, great. So what can people do to ease the strain? 'Try to connect. Leave your office and ask someone how they're doing—and really mean it.' Then, wait to hear that work is making them totally nuts."

demand for documents as the reason it has delayed reporting results for the quarter ended Feb. 29.

AN UGLY ACCUSATION AT GENERAL ELECTRIC

► A suit filed against General Electric on Apr. 21 by a former executive reads like a spy novel. Allegations include attempted price-fixing in the industrial-diamond business, a kickback scheme, and expense-account cheating. Former GE Vice-President Edward Russell claims he was wrongfully fired in November after protesting an alleged GE

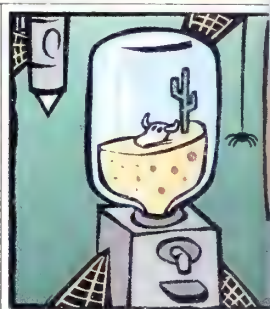
conspiracy with De Beers Consolidated Mines of South Africa to manipulate the industrial-diamond market.

A GE spokesman says the company is reviewing Russell's charges but has no reason to believe they have merit. He says Russell was fired because of poor performance. And GE is cooperating with Justice Dept. inquiry into price-fixing in the industrial diamond business.

CELLULAR-PC HOOKUP GET SIMPLER

► Few people use a cellular phone to send and receive computer data. The process is clumsy, unreliable, and pricey. Now, IBM and a group of nine cellular carriers—including McCaw Cellular, GTE Mobile Communications, and six of the seven regional Bell companies—hope to change that. On Apr. 22, they proposed a standard for data network that carriers can add cheaply and quickly to their systems.

No prices were announced but the network, expected to start in 1993, has lined up a big customer: Sears, which plans to test the network on its service fleet, Allstate insurance agents, and other operations.



OK. Let's get down to business." Funny how the two objects below resemble one another. But if you had to invest a sizeable chunk of your cash flow in a new phone system, you might fail to see the humor. Which is why you should know about CentraNet[®] service from GTE. With CentraNet[®], you get all the features and flexibility of the most sophisticated business telephone system, without a large capital outlay. So there's no risk of buying too much system, or too little. In fact, there's hardly a risk at all. Because everything you need for CentraNet[®] to work on your phones is located at our office, not yours. And, you can add lines or change features anytime. For example, if you have an office in one location and expand to another, you can connect the two without incurring any additional expenses. Call us at 1-800-462-6000. Because you do have a choice. Go with **CentraNet[®] service.** Or go with the flow.



Why pour money down either one?



CentraNet[®] is a registered service mark of GTE Corporation. CentraNet[®] service is available in most areas.

GTE

THE POWER IS ON



(TOP TO BOTTOM) ILLUSTRATION BY ROBERT HAMMERMAN. CARTOON BY GORE. THE CHANGING LEADERS.

In 100 countries, business turns to Unisys to help the wheels of business turn.

Some people believe business is what keeps the world go round. But who keeps business go round?

For thousands of companies and governments around the world, the answer is Unisys.

One hundred forty airlines rely on Unisys information systems for baggage, departure control, and flight reservations.

Over 80% of the world's largest banks, including nine of America's top ten, and every one of Japan's top ten, rely on our systems for branch automation, check processing, funds transfer, and more.

For the United States alone,

our systems help connect 85% of all long distance phone calls. Telecommunications companies across the globe turn to us for revenue-generating enhanced services.

And in the business of government, over 1,600 government agencies worldwide depend on Unisys computers for domestic and international operations.

There is a term for all this: *mission critical*. Solutions without which a business cannot do business. Sixty thousand customers in 100 coun-

tries recognize Unisys as a leader at delivering mission-critical solutions. And as a pioneer at delivering them on open information networks.

Our customers choose us not only for the strength of our technology, but also for our ability to apply it through a careful understanding of their industries. And whatever their industries, they know us for the depth of our commitment to providing the services behind the systems.

Now it's your turn. Call us at 1-800-448-1424, ext. 180. Ask how the advanced solutions and dedicated people of Unisys can help your business shift into a higher gear.

UNISYS

We make it happen.

REFRESHING SEAGRAM'S GIN HAS HIDDEN PLEASURE.
WELCOME INTO THE FOLD.

A ▶

(FOLD SO "A" MEETS "B")

◀ B



BUSINESS LOBBYISTS WILL MISS THOSE OLD, FAMILIAR FACES

Voters may be screaming for wholesale change in Congress, but the notion doesn't sit well in Gucci Gulch. At a recent gathering of business lobbyists, the talk was the 68 House and Senate members—so far—who won't be back next year. John C. White, a former Democratic Party chairman who now represents oil and gas and other business interests, summed up his colleagues' fears when he asked: "How are we going to make a living?" Somehow, the lobbyists will survive. But with retirements ready at a postwar record and angry voters increasingly inclined to toss out incumbents, Corporate America could be in for some rough going on Capitol Hill. A crowd of familiar faces may make a capital-gains tax cut less likely, banking reform far more difficult, and a hike for the rich all but inevitable.

WELCOME. Retirements and primary decisions are taking a particularly heavy toll on one of the committees most important to business: House Ways & Means, Appropriations, and the banking panels in both House and Senate. At least 7 of 23 Ways & Means Democrats won't be back. Departures span the ideological spectrum, but the key setback for business may be Representative Ed Jenkins (Pa.), a staunch supporter of preferential tax rates on capital gains. But the loss of old friends may trouble lobbyists less than the attitudes of the newcomers. Prominent among them will be liberal minorities and women who have benefited from redistricting.

Republicans and moderate Democrats are likely to win in the newly created Sunbelt districts. But even conservatives are rising as insurgents. "The new members are running on Washington themes, and when a Washington Establishment type comes to call representing business interests, they're going to get a very stiff welcome," says White.

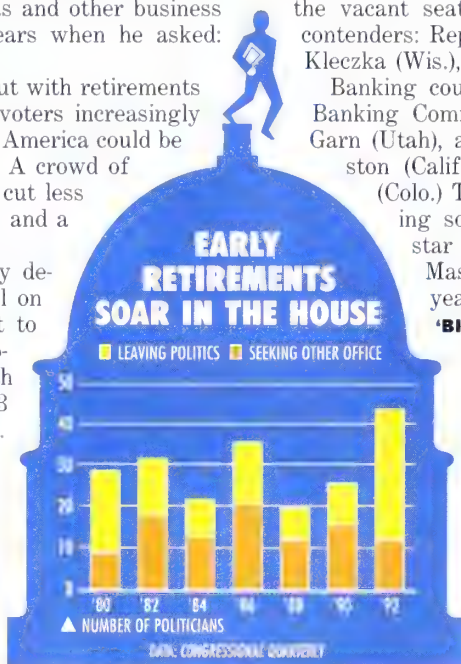
While Republicans likely will gain seats in the House, the most powerful committees may well turn out to be more liberal. The Ways & Means vacancies, which could swell to more than a dozen by November, give Chairman Dan Rostenkowski (D-Ill.) and the Democratic leadership a chance to fill the vacant seats with handpicked loyalists. Among the contenders: Representatives Mike Kopetski (Ore.), Gerald Kleczka (Wis.), and John Lewis (Ga.).

Banking could see the biggest upheaval. The Senate Banking Committee is losing its top Republican, Jake Garn (Utah), along with veteran Democrats Alan Cranston (Calif.), Alan Dixon (Ill.), and Timothy Wirth (Colo.). The House Banking Committee also is losing some senior members. In the process, the star of Representative Joseph Kennedy II (D-Mass.), who gave the industry fits during last year's bank-reform fight, is rising.

'BIG-TIME DISFAVOR.' This is bad news for the hopes of the financial-services industry for another try at reforming the nation's antiquated banking laws, and it may sound the death knell for any move to expand the powers of banks. "The new crowd would frown on that," says one senior Democratic staffer. "Big institutions will be in big-time disfavor." And the fight to fund the thrift cleanup will become increasingly difficult as new members resist paying for a mess left by their predecessors.

The last big influx of new members, the 1974 "Watergate babies," produced an undisciplined Congress resistant to any leadership. A big freshman class, many of whom are campaigning as bomb-throwers, is likely to prove equally rambunctious. A new wind blowing through the Capitol may be welcome, but it's likely to give business interests a good buffeting for a while.

By Richard S. Dunham



ITAL WRAPUP

DEFENSE

Supporters of the Seawolf attack submarine are abandoning any pretense that their fight to save the threatened program has much to do with current U.S. defense needs. Instead, makers of continued construction at General Dynamics Corp.'s Electric Boat facility in Groton, Conn., are turning the struggle purely as a jobs issue. In a speech planned for Apr. 24, Admiral Carlisle A. H. Trost, the former Chief of Naval Operations who is now a GD consultant, will argue that Seawolf production is critical to 60,000 jobs in 37 states. To hammer the point home, his National Press Club audi-

ence will be given state-by-state lists of Seawolf subcontracts. The Pentagon does not want to buy any subs beyond the first prototype, but a House Appropriations subcommittee recently voted to fund a second ship.

THE SENATE

Senator John Glenn (D-Ohio), once thought vulnerable because of his link to convicted drift scamster Charles H. Keating, has opened a comfortable lead in his reelection bid. A new Ohio Poll shows Glenn, who chairs the Governmental Affairs Committee, with a so-so 56% approval rating but a 62%-28% lead over lackluster opponent Lieutenant Governor Michael DeWine.

POLLS

National opinion surveys show Ross Perot drawing up to a quarter of the vote as an independent Presidential candidate. But the data-processing billionaire may have the computer-nerd vote largely to himself. An on-line poll conducted by Computer-Based Communications, of Lexington, Mass., shows Perot getting 41% of the vote, compared with 30% for President Bush and 29% for Bill Clinton. It may be a while, however, before this new method of polling catches on. Only 140 users in the Northeastern U.S. have so far called CBC's Argus bulletin board to voice their opinion.



**JOINT VENTURE
AUTOLATINA HAS CUT
REDUNDANCIES IN
BRAZIL AND ARGENTINA**

THE NEW WORLD'S NEWEST TRADE BLOC

The four-nation Mercosur is now South America's richest market

In the dusty pampas town of Puán, 300 miles southwest of Buenos Aires, Brazil's green-and-yellow flag flutters alongside Argentina's blue and white banner above the Maltaria Pampa factory. The thriving plant was built by Brazil's biggest brewer, with Argentine partners, to supply malt to its breweries. Around the factory, streets named *Brazil*, *Argentina*, *América Latina*, and *Integración* celebrate a new spirit of regional togetherness. "The town is fanatical about the plant and what it has done for the local economy," says Argentine partner Carlos Rodríguez.

If all goes well, the successful Puán venture could be the wave of the future for a big chunk of Latin America. While the U.S. and Mexico negotiate a free-trade pact, the barriers already are drop-

ping in the four-nation Southern Common Market, or Mercosur. The aim is to accelerate economic growth by linking Argentina, Brazil, Paraguay, and Uruguay in a market of nearly 190 million people, with a \$427 billion total gross regional product and Latin America's biggest industrial base (map). Most of the expansion will be concentrated in South America's economic powerhouse—the 1,200-mile-long swath of industries, farms, and sprawling cities on the east coast from São Paulo to Buenos Aires.

'COLLECTIVE DISCIPLINE.' To cash in on the emerging regional market, many local and foreign companies are stepping up cross-border investments, often through joint ventures. Such U.S. multinationals as Monsanto, Ford, and Eastman Kodak are on the move (table). And

as Mercosur spurs new investment, U.S. exporters, particularly of capital goods, are likely to benefit. U.S. exports to the region rose to \$8.8 billion last year, up from \$6.7 billion in 1990.

Opening up regional trade will strengthen Mercosur members' bargaining clout when the time comes to negotiate with the North American Free Trade Agreement (NAFTA) to create a hemispheric market. President Bush's Enterprise Initiative for the Americas set that goal. On May 28, the U.S. and Mercosur members will meet in Buenos Aires to discuss progress toward freeing trade and investment flows.

As barriers fall under Mercosur, the pact will also speed up the shift from state intervention to free markets throughout the hemisphere. Under the March, 1991, Asunción Treaty, Mercosur members are cutting duties every six months, aiming to eliminate tariff barriers altogether by Dec. 31, 1994. To meet demands of the treaty, governments also have to continue deregulating their economies. "It's a form of regional collective discipline," says Carlos Floria of Argentina's University of San Andrés.

Traditionally, the region has traded mostly with Europe and the U.S. But trade within Mercosur jumped to \$4 billion in 1991, up from \$2.2 billion in 1987, and another sharp rise is expected this year.

signs of the new single market are everywhere. Brazil's largest auto-parts center, Cofap, for example, bought a stake in its Argentine counterpart share distribution networks. Italy's zione Holding, which controls apparel center Benetton, bought a 1-million-acre Argentine sheep ranch to supply wool to its factories in Brazil and Argentina. And Brazilian agribusiness giant Cia Concoridia Industria e Comercio moved out into Argentina three months ago. Sadia is selling processed chicken and turkey and buying Argentine wheat, meat, and plastic margarine containers. Executives say that sales to Argentina, negligible in the past, could soon reach 10% of Brazil's \$280 million in annual worldwide exports.

FOCUS. Kodak do Brasil is setting up a distribution center near São Paulo. It will import Kodak products from around the world for sale in the region starting in 1993. The company's director of corporate relations Gilberto Ananias says: "It will be much easier to work within this market than in other countries." For other multinationals, a benefit is slicing through the snarl of rules that have hurt business in the region. "We've seen an easing of restrictions and red tape recently, particularly with Argentina," says James J. Berg, senior vice-president of Volt Information Sciences Inc., a New York-based provider of digital typesetting services. Volt is expanding its regional service center and printing plant in Montevideo, Uruguay.

There are still skeptics, both local and foreign, who doubt that Mercosur will cut its schedule for easing trade barriers—or that it will work at all. For Mercosur to succeed, Brazil will have to continue its useful moves to cut inflation, still 20% a month. And Mercosur faces tough decisions. Hundreds of products are temporarily exempted from tariff cuts, and critics are campaigning to keep the ax from falling on them.

Still, the market-opening is acquiring its own momentum. Even before Mercosur, Ford Motor Co. and Volkswagen started looking for ways to combine production in Brazil and Argentina. Their jointly owned company, Volkswagen do Brasil, has reduced its factories from 15 to 10 since 1987 and cut its workforce by 37%. Last month, the auto giant

opened a \$230 million factory in Córdoba, Argentina, to supply transmissions for all Autolatina cars by mid-1993. "We think that in the long run, we can allocate investments better and not have to duplicate facilities," says Ivan Fonseca e Silva, an Autolatina vice-president.

NO RUSH. Even companies still tepid to Mercosur are trying to figure out its impact on their businesses, from marketing to factory location. During Latin America's protectionist era, U.S. companies scattered plants across the region to supply individual national markets. Now, consolidation is likely. Take the

The trade pact could deliver some less obvious advantages to the multinationals, too. Many local companies are keen on striking joint ventures with foreign giants to help them meet rising competition as protection vanishes. Argentina's petrochemical industry will soon be starting at a Brazilian counterpart that's seven times larger. To achieve economies of scale, PASA Petroquímica, the No. 1 Argentine petrochemical producer, recently joined forces with Monsanto to make plastics using both companies' plants in

Argentina. PASA is exploring similar links with two other companies. "By doing this," says PASA President Ruben Puentedura, "we'll be able to compete not only with Brazil but with the rest of the world."

Eventually, if Mercosur links up with NAFTA, the region's industries will face head-on competition from the U.S. Argentines are more enthusiastic than

Brazilians about such an opening. "Mercosur and Bush's Initiative for the Americas are two faces of the same coin," says Felix Peña, Argentina's Mercosur delegate. But many Brazilian executives are in no rush to compete with the U.S. "Sooner or later, Brazil will be part of a big economic bloc," says Luiz Fernando Furlan, who heads a Mercosur committee at the São Paulo Federation of Industries. "But we'll have to have some experience first, and it's best if that is gained with neighboring countries."

Even so, some companies, such as Kodak, are already looking beyond Mercosur to the possibility of a vast continental trading area. Venezuela and Colombia have opened the border between them as part of a separate Andean trade pact that also includes Ecuador, Bolivia, and Peru. Although Chile has kept aloof from Mercosur so far,

Chilean companies are buying dozens of Argentine businesses to gain a foothold in Mercosur. As the joint-venture malt factory on the Argentine pampas proclaims, free trade can bring lots of new riches.

By Geri Smith in Rio de Janeiro and John Pearson in New York, with bureau reports

MERCOSUR AT A GLANCE

MEMBERS:
BRAZIL, ARGENTINA,
URUGUAY, PARAGUAY

POPULATION: 190 MILLION

GROSS DOMESTIC PRODUCT:
\$427 BILLION

INTRABLOC TRADE:
\$4.9 BILLION



WHO'S DOING DEALS IN THE NEW FREE-TRADE AREA

EASTMAN KODAK

Building a distribution center near São Paulo to supply the region

FORD-VOLKSWAGEN

Jointly making transmissions at a new \$230 million Argentine plant for cars assembled in Brazil and Argentina

MONSANTO

Formed a joint venture with Argentina's PASA to meet tough regional competition in plastics

VOLT INFORMATION SCIENCES

Expanding its regional center in Uruguay for typesetting equipment

petrochemical industry. "It's efficient, but [it] was built during the years of almost absolute protectionism," says Monsanto do Brasil President Antonio Carlos Queiroz. Monsanto now has two plants making ingredients for its Roundup herbicide—one in Argentina, the other in Brazil. Says Queiroz: "One plant could supply both countries."

VIETNAM

BACK TO HANOI, WITH BRIEFCASES

Cooperation on MIAs has Washington opening the door to U.S. business

American Telephone & Telegraph Co. may bill itself as "the right choice," but until now, Americans trying to dial Vietnam directly have had no choice at all. The U.S. government severed communications links 17 years ago, forcing American callers to pay as much as \$8 a minute to black-market telephone operators. But on Apr. 13, the Bush Administration allowed AT&T to resume service, and three days later, the communications giant signed an accord with Hanoi. With revenues that could hit \$20 million in the first year, AT&T officials couldn't be happier.

They're not the only ones cheering. The lifting of the telecommunications ban is widely viewed by U.S. multinationals as a sign that their time will come soon. As Vietnam steps up its cooperation in accounting for 2,273 missing American GIs, Washington is finally opening the door to U.S. companies long locked out of one of Asia's most promising markets. "Washington is saying: 'If you want to get into Vietnam, come and apply,'" says an Asia-based banker. Following AT&T, Sprint Corp. announced plans for a direct-dial service. And companies from United Airlines Inc. to Westinghouse Electric Corp. are gearing up.

FIVE-POINT PLAN. While the embargo may not be officially lifted until after the U.S. elections, *BUSINESS WEEK* has learned that the U.S. will soon take further steps to ease restrictions. Possible moves include allowing companies to set up offices in Vietnam, do feasibility studies, and sign preliminary contracts—as long as Hanoi makes good on its MIA pledges. Drug companies may be the first to benefit if the U.S. removes a ban on medical supplies. "What we'll see is a gradual opening for U.S. investment in banking, insurance, and oil exploration," says Senator Frank Murkowski (R-Alaska).

The ice was broken in early March, when Assistant Secretary of State for East Asian & Pacific Affairs Richard H.

Solomon went to Hanoi with a five-point program to accelerate investigations of missing U.S. soldiers. To his surprise, Vietnamese Foreign Minister Nguyen Manh Cam agreed to the plan, which would give the U.S. greater access to Vietnamese military archives and speed up investigations of live sightings of GIs. "The suspicions of the past are being dispelled, and that's laying the base for further cooperation," says a State Dept. official. In a ground-breaking move, the



AMERICAN GOODS HAVE CACHET FOR MANY VIETNAMESE CONSUMERS

State Dept. decided on Apr. 22 to allow the Vietnam Veterans of America Foundation to open an office in Hanoi. And more could follow if a Senate delegation headed by John F. Kerry (D-Mass.) that is now in Indochina comes home with an upbeat report.

As foreign companies move in, Vietnam is jumping with capitalist spirit. "Ho Chi Minh City [formerly Saigon] looks more hustle-bustle than St. Louis," says Eugene Matthews, president of ASHTA International Inc., an investment and consulting firm, and the only

U.S. businessman living in Vietnam.

U.S. airliners cannot provide regular service to Vietnam, but that didn't stop United Airlines Chairman Steven Wolf from flying to Hanoi in April to meet with transportation officials. Robert Allen, chairman of Delta Air Lines Inc., also visited Vietnam, and the company has even invited Vietnamese aviation officials to its Atlanta headquarters. Northwest Airlines Inc. is ahead of everybody. For several years, it has been the only U.S. carrier authorized to fly Cambodian refugees from Ho Chi Minh City to Bangkok. Northwest hopes it will enable it to be the first U.S. airline to win a route when the embargo is lifted.

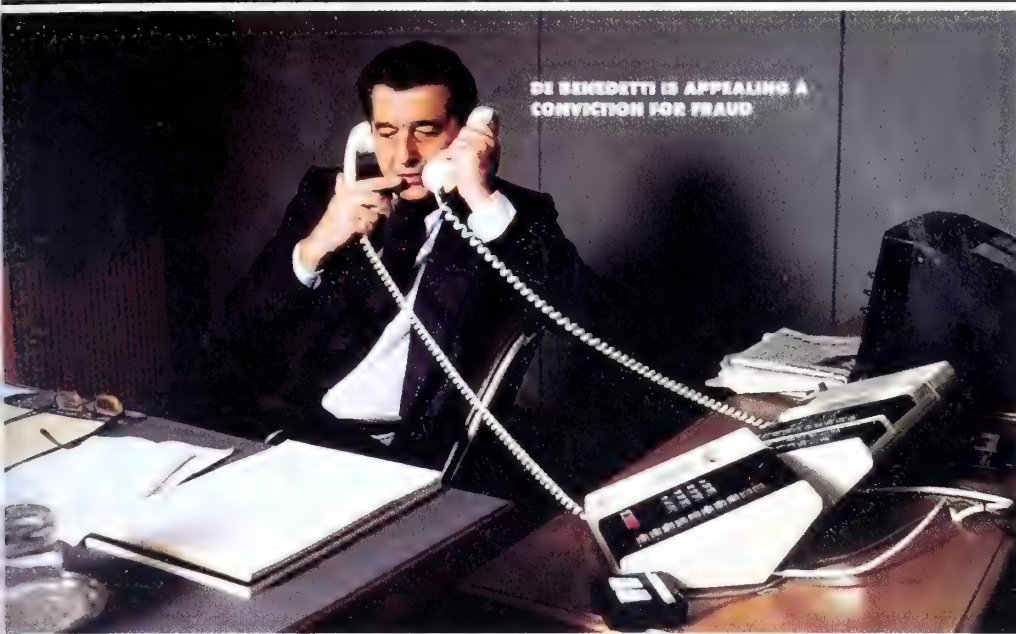
CHAMPING AT THE BIT. Westinghouse is taking soundings for potential sales of electric power plants and its Therm King refrigerated trucks. Executives

from Mobil, Exxon, and Chevron have been shuttling in and out, hoping to be able to drill in big offshore reserves they discovered toward the end of the Vietnam war. Sources say accountant Ernst & Young has managed to open an office in Hanoi while working as an adviser to the Vietnamese government, helping to draft tax and investment policy. Ernst & Young declined to comment. In March, the American Chamber of Commerce in Hong Kong visited its second delegation to Vietnam in five months.

A literate population of 60 million who are familiar with many American brand names makes Vietnam an enticing market for U.S. companies. Coke, Pepsi, Kodak film, Zest soap, Colgate toothpaste, and Juicy Fruit gum are smuggled into the country. Many Vietnamese used these goods during the war, and now receive them in parcels from relatives in the U.S. But foreign rivals, unencumbered by the trade ban, have a head start, and even the Japanese Foreign Ministry is weighing "whether to resume assistance," says spokesman Masamichi Hanabus.

For the U.S., progress hinges on continued cooperation from the Vietnamese. If Hanoi backtracks on the MIA issue, the process could stall. But for now, momentum is building in the other direction, to the delight of U.S. businessmen.

By Amy Borrus in Washington, Joyce Barnathan in New York, and Peter Engardio in Hong Kong, and bureau reports



DE BENEDETTI IS APPEALING A CONVICTION FOR FRAUD

DE BENEDETTI'S LATEST ROLE: ISYPHUS

Turning around Olivetti is an uphill battle—and not his only one

Everyone has a bad day now and then, but Italy's Carlo De Benedetti may be seeing more than his share. His failed 1988 raid on a Belgian conglomerate saddled him with \$1 billion in debt. His 1989 takeover bid for media giant Mondadori turned into one of Italy's messiest corporate battles. His flagship company, computer maker Olivetti, fell into the red last year, its first loss in 3 years. And now a Milan court has convicted him and 32 co-defendants of fraud in the bankruptcy of Banco Ambrosiano in 1982, Italy's biggest post-war bank collapse.

Although De Benedetti drew a six-year, four-month sentence, it's unlikely he'll be turning in his tailored pin-stripes for jailhouse stripes any time now—if ever. He denies any wrongdoing and has appealed. But uncertainty is the last thing he needs now as he struggles to turn Olivetti around.

De Benedetti insists his role at Ambrosiano was marginal; he resigned as deputy chairman in May 1982 after serving only 65 days. It was hardly time, De Benedetti told *Business Week*, even to know about the \$1 billion in shady loans to some shell companies controlled by the Vatican that ultimately toppled the bank. His only mistake, he says, was to be tempted into trying to rescue the tottering institution in the first place. Otherwise, he says, "I could repeat everything I did."

Analysts say De Benedetti may be one of many victims snared by Italy's outdated bankruptcy laws. After all, a lower court last year cleared him of charges that he had illicitly profited from the sale of his 2% stake in Ambrosiano just months before the collapse. Some aides suggest the Apr. 16 judgment is political retribution for De Benedetti's outspoken criticism of the government. In any case, his appeal is likely to stretch out at least three years and possibly past the 1997 statute of limitations on the case, rendering the sentence moot.

BREATHING ROOM. For now, Olivetti is De Benedetti's biggest worry. Final results won't be released until early May, but insiders hint that the 1991 loss, including write-offs, could amount as high as \$340 million on a 5% drop in sales, to about \$7.2 billion. That's still better than some competitors. But with no relief in sight from slumping demand and a ferocious price war, analysts figure that Europe's leading PC maker will be lucky to break even this year on flat sales.

A strong sales boost may come from a snazzy, ground-breaking, two-pound portable PC called Quaderno

Olivetti's stock, even after recovering from a 4.8% plunge on news of the conviction, is still down more than 60% from two years ago.

Olivetti must soon choose a major partner to supply the core microprocessor technology the company needs to carry it through the 1990s. Analysts speculate the leading candidate is Digital Equipment Corp. (page 30), but Hewlett-Packard and Japan's NEC may also be in the running. A deal would likely involve a substantial minority investment in Olivetti, giving De Benedetti the breathing room he covets to stay independent. But

he would prefer to be in a stronger negotiating position. "To do an alliance, we have to get our own house in order first," he says.

Determined to reverse Olivetti's fortunes, De Benedetti took operating control last November for the first time since the early 1980s, shoving aside respected Managing Director Vittorio Cassoni. De Benedetti's first move was to cut costs by regrouping three operating units Cassoni separated in 1988, hoping to take them public. Union opposition forced him to scale back his layoff plan, but he is still targeting labor savings of \$300 million over the next two years.

Olivetti's strategic challenge is equally daunting: It must keep revenues flowing in the short run with hot new products while building up its weak corporate computer network business. That's where future profits are most promising, but it's also the same market all major competitors are targeting. De Benedetti hopes to get a strong sales boost from a snazzy, ground-breaking, two-pound portable PC called Quaderno, which will be introduced at the Italian Grand Prix in mid-May. On the network side, Olivetti formed a joint venture in early April with Siemens and Groupe Bull to go after a bonanza of new European Community contracts for pan-European information systems.

Still, there are no quick fixes. One De Benedetti plan, to triple Olivetti's critical software division overnight by buying state-owned Finsiel, was recently torpedoed by the government. Yet, De Benedetti has strong motivation to persevere in the turnaround effort: If he can mend Olivetti, it could go a long way to redeeming his own reputation.

By John Rossant in Rome and Jonathan B. Levine in Paris

This is the only dollar bill of its kind in the world.



It was entrusted to us by one of our 5 million policyowners. They, in turn, were given it by an employer as part of their wages.

Wages they had to work hard for.

The least we can do is invest it wisely and prudently, so that whenever it's needed, it will be here, ready and waiting.



The Company You Keep.®

JUST HOW MUCH WILL BE ENOUGH FOR THE REPUBLICS?

all it Soviet sticker shock. When International Monetary Fund Executive Director Michel Camdessus announced on Apr. 15 that the price tag for overhauling the former Soviet Union would far exceed the Group of Seven's \$24 billion aid and loan package, the timing was unwelcome for the Bush administration. Facing a recession-wary American public in an election year, the President and Secretary of State James Baker III are scrambling to win congressional support for the U.S.'s \$4.35 billion share of the plan. Now comes an IMF report that the bill for the West could total \$145 billion over 10 years.

The numbers being bandied about have an Alice in Wonderland quality about them. Irritated U.S. officials say a gulf is opening between Western governments and aid officials here as Camdessus and European Commission President Jacques Attali, who have been tapped to overhaul the former Soviet bloc. In advance of a meeting in Washington, D.C., on Apr. 26, Camdessus and company are painting a dire economic picture of the former Soviet Union in order to obtain as much funding as possible.

Camdessus is trying to persuade Western leaders to help all 15 of the former Soviet republics. Russia has received the lion's share of pledges so far. But the potential donors—the U.S., Germany, and Japan—are in no hurry to pony up more. "Nobody is going to throw a lot of money at these countries right away," says a White House official.

HERRING. While IMF experts have recently visited Belarus, Kazakhstan, and Ukraine, so far only Russia has the sort of reform program in place that the IMF would want to pump money into. An IMF-funded program is likely to begin there

this summer. Ukraine, the second-largest republic, is now preoccupied with a dangerous display of independence from Russia. While the ex-communist pols currently controlling Ukraine jockey with Moscow over ownership of the Black Sea fleet, they continue to run big budget deficits by heavily underwriting milk, bread, and other foods. "The anti-Russian campaign allows them to divert attention from problems at home," says one State Dept. official.

Even Russia faces problems in keeping to its reform commitments in the months ahead. On the plus side, Russian President Boris Yeltsin did survive a stiff challenge from conservatives in the Russian Congress of People's Deputies. But Yeltsin shows signs of the stop-and-go policies that contributed to the demise of his predecessor Mikhail Gorbachev. The Moscow government missed its first two commitments on a preliminary reform program, worked out with the IMF. It failed to free fuel prices by Apr. 20, and it didn't unify the various exchange rates for the ruble. "I don't see them willing to make the kind of commitments that the international financial organizations expect," says a Western banker.

All this uncertainty gives Western leaders plenty of excuses to delay putting up anything beyond the initial \$24 billion—which contained only \$4.5 billion in new money. Although the Japanese are considering offering aid to the Asian republics, they are preoccupied with their own bank-capital crisis. The Germans say they are waiting for more detailed reform programs. And while the Russian Republic's clout will probably continue to win it substantial aid, the other republics may wind up with just some crumbs.

By Brian Bremner, with Mike McNamee, in Washington and Rose Brady in Moscow



HARD TIMES: FEARS OF A SOVIET SINKHOLE

GLOBAL WRAPUP

GERMANY

Frustrated by U.S. reluctance to guarantee \$10 billion in loans to settle Jewish immigrants from the former Soviet Union, Israel is now asking Germany for some \$6 billion in guarantees. So far, the Germans have brushed off the request. But Chancellor Helmut Kohl is under pressure to be more flexible. If Israel can't finance jobs and housing for incoming Jews, they could head instead for Germany, which worries about being overwhelmed by refugees from the East. More than 7,236 Soviet Jews came to Germany from June, 1990, to November, 1991. An additional 25,385 have ap-

plied for visas, and tens of thousands more have asked for application forms.

EUROPE

Tired of being portrayed as the bad guy in current world-trade talks, the European Community is trying to turn the tables on the U.S. in environmental politics. As the centerpiece of its program for the Earth Summit in Rio de Janeiro this June, the EC has proposed a \$10-a-barrel oil tax. Such a levy would aim to slow global warming by curbing hydrocarbon use. EC officials think they have hit upon a no-lose issue. If, as expected, the U.S. rejects the tax idea, Washington will look like an environmental do-nothing at Rio. If

the U.S. goes along, the EC will be able to claim credit for leading a radical green initiative.

SOUTH KOREA

The feud between the government and the Hyundai group is escalating. On Apr. 21, the government arrested Chung Mong-Hun, 44, vice-chairman of Hyundai's shipping unit, on tax-evasion charges. The arrested man is a son of Hyundai founder Chung Ju-Yung, who has angered the government by going into politics. The continued harassment of Hyundai is intended to silence the elder Chung and persuade him not to run in the fall presidential elections.

HEIKO THIEME HAS A SIXTH SENSE FOR STOCKS

The German banker's American Heritage had a 97% return in '91

Most people have a few things they feel they must accomplish before they die. For Heiko Thieme, climbing the Matterhorn was one. He was 29. Never mind that the German money manager had never climbed before. When the guide asked, Thieme lied, claiming he had climbed California's Mt. Whitney. "Which side?" Thieme fudged: "It wasn't the easy one." Yet once he was on the trail, Thieme became afraid and tried to escape by offering to escort an ailing woman back to safe ground. No such luck. Upon reaching the summit, Thieme prepared his speech: "Look, no matter how you do it—helicopter, whatever—get me down, I'm scared stiff." But he still had his pride—and threw caution to the winds for the difficult descent. At the bottom, Thieme fessed up. "For that, you didn't do too badly," he recalls the guide saying.

Now, 20 years later, the adventurer can claim a similar feat in the financial world. After spending a decade as Deutsche Bank's top U.S. equities strategist, advising thousands of bank customers on stock purchases, Thieme (pronounced TEE-muh) decided to try his own hand at stock picking. In 1990, he bought tiny, ailing American Heritage Fund. He finished 1990 poorly. But in 1991, his first full year of managing the fund, he racked up a 97% gain. That made American Heritage the year's No. 1 capital-appreciation fund and the fifth-best-performing fund overall, according to Lipper Analytical Securities Corp.

"Last year was spectacular," says Thieme. "But I will never—repeat, never—produce another 97% return." He grins: "It will either be more, or it'll be less." An irrepress-

ible booster, joker, contrarian, and outspoken observer of everything from economics to art, the 48-year-old German is about as far from the stereotype of a button-downed German banker as you can get. Working 100-hour weeks, occasionally sleeping on an office sofa when he's too tired to drive home to Stamford, Conn., Thieme not only manages American Heritage but keeps a half-dozen other projects going.

He manages \$20 million in private

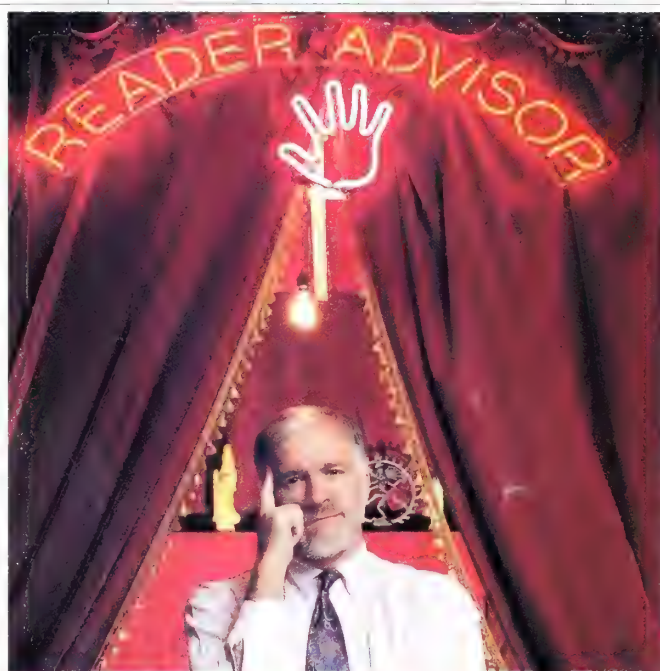
money. He directs a \$600 million pension-fund group in Seattle. And as consultant to Deutsche Bank Group, Thieme makes 24 speeches for the bank a year in addition to writing a chatty, bilingual newsletter, *Viewpoint* (*Der Standpunkt*), the German version of which Deutsche Bank distributes to customers. He writes a weekly "Letter from Wall Street" for Germany's *Frankfurter Allgemeine Zeitung*. For the past years, Thieme has also run a free hotline in Germany that he updates daily with recorded economic analyses and investment tips. He still runs it—only now, charges \$1,000 per subscription.

But the job that makes Thieme scramble hardest is managing American Heritage. Money is pouring in. With assets of roughly \$2 million through much of 1991, the success of the no-load fund has boosted assets to \$26 million. So far this year, American Heritage is up 14.7% and ranks No. 17, according to Lipper

HIGH TURNOVER. Thieme squirms when people try to pin him down on the philosophy that won him such stellar results. "I don't like to be put in a box," he says. Some critics speculate that he had extraordinary access to initial public offerings through Bear, Stearns & Co. broker who owns 10% of American Heritage. And "Heiko traded a lot," notes A. Michael Lipper of Lipper Analytical. Conservative managers may change 25% of their holdings in a year; Thieme's portfolio turnover ran around 600% in 1991.

Thieme calls the talk about Bear Stearns hogwash: American Heritage isn't even allowed to buy IPOs from Bear Stearns. The fund has done well with new issues—its Marvel Entertainment Group holding doubled in four months—but Thieme says only about 10% of the fund's appreciation came from IPOs. He admits he traded a lot but claims he's a value investor, not a technical trader. "I'm a fundamentalist, but I always have a price."

So while he saw value in biotech stocks in early 1991, once biotech mania set in, he got out. The same, he says, goes for consumer cyclical stocks such as RJR Nabisco Inc. and Philip Morris Cos., which he has sold and is waiting to buy



THIEME'S HOT PICKS

BIOTECHNOLOGY Grossly inflated last year, but has since corrected. Picks: Amgen, Immune Response. For riskier portfolios, Interferon Sciences

TELECOMMUNICATIONS "If you have enough money, buy every telephone company in the world. The world needs telecommunications." Picks: AT&T and Teléfonos de México. MTC Electronic is "risky" but could double this year

COMPUTERS Will benefit from a recovery. IBM between 80 and 90 is an "absolute buy." Unisys an attractive special situation

INTEREST-RATE SENSITIVE J. P. Morgan; Citicorp is speculative

CONSUMER CYCLICALS The consumer is "engine of the recovery." Picks: General Motors, Ferrofluidics

DATA: BW



The most competitive companies
leave as few questions up in the air as possible.

To find their answers, 90% of the world's
airlines rely on data communications networks
created by Northern Telecom.



Technology the world calls on.

A leader in digital communications, supplying equipment in over 80 countries.

"How Can I Pursue Growth With Lower Risk?"

Today, many people view stock investing as the best strategy for long-term growth, but want some moderation that limits some of the risks associated with aggressive stock investing. Fidelity Growth & Income Portfolio is managed to meet both objectives.

Managed to Turn Value Into Growth...

With freedom to explore good values wherever they may be, Fidelity Growth & Income Portfolio is managed to invest in undervalued stocks that have the potential for good growth over time.

...With the Potential to Limit Market Risk

Unlike aggressive stock funds, Fidelity Growth & Income Portfolio has the flexibility to adjust to market downturns and shift its portfolio toward more high-yield securities. Of course, share price and return will vary.

Find Out More Today. Call or write for a free prospectus with more complete information including charges and expenses. Read it carefully before you invest or send money. Start your investment with \$2,500, or \$500 for IRAs.

Visit a Fidelity Investor Center or Call 24 Hours
1-800-544-8888



Total returns include change in share price, reinvestment of dividends and capital gains and the effect of the Portfolio's 2% sales charge. Past performance is no guarantee of future results and you may have a gain or loss when you sell your shares. Fidelity Distributors Corporation.

2r

CODE: BW/GAI/050492

People

on dips. The fund usually holds 25% stocks: about 60% in big-company stocks and 40% in smaller ones.

Thieme in action is a one-man show. His office in Manhattan's Deutsche Bank building offers a spectacular view of St. Patrick's Cathedral, but it's a moment when Thieme gazes out. When questions in German and English flood the frenzied staff, he pulls away from the stock machine to schmooze by the phone with an underwriter. He takes a break from his wife, Corinne, but puts her on hold to speak with a Mideast investor who wants him to build a new fund. Corinne disappears from the line. Thieme is too busy exchanging greetings with a caller from Austria to notice. "Napoleon used to do 10 things at a time," he says. "I can only do five."

LAW DEGREE. Thieme's private life is as packed. When not riding horses or skiing with his wife and three children, he pilots single-engine planes, and has tried parachuting and soaring. High-altitude glider piloting—as well as growing up in the medieval town of Goslar, he earned a law degree at the University of Hamburg. But he became entranced with economics while doing a doctoral thesis on securities law and dropped law to join the financial world. He worked at Wood McKenzie in London and White, Weld & Co. in London before Deutsche Bank asked him to come to New York in 1979 to run its equities business.

Thieme's volubility on the subject of investment strategies earned him the nickname "our guru from Wall Street" inside the bank. Bank sources say he had many backers in top management, but his often contrarian views rub some at the conservative institution the wrong way and has kept the relationship strained. Andrew Dalski, a former colleague, says Thieme once told a business magazine that it would be smart to short the Germany Fund. Since the fund was sponsored by Deutsche Bank, "they weren't very happy about that remark," he recalls, adding: "In retrospect, Heiko was right."

Thieme's biggest concern these days is proving that last year's success wasn't a fluke. He says he's betting on continued bull market powered by economic recovery and an ongoing surfeit of funds into equities, driven by low interest rates and increased savings. Thieme's solid 1991 results leave him with a little more room to breathe, he says. "I'm not hanging on desperately anymore. Now, I'd be happy if I stay in the top 10%." That wouldn't be too bad—for a beginner.

By Andrea Rothman in New York, and Igor Reichlin in Bonn

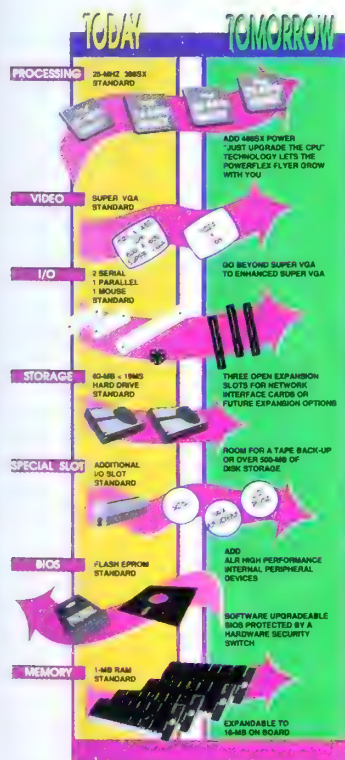
NEW High FLYER Bundle... 80MB Hard Drive • 2MB RAM • Super VGA Monitor 1024 x 768 • **NEW**
• 512-KB Video RAM • ALR MS-DOSTM 5.0 • Mouse... \$1,799

Remember Your First Flyer?

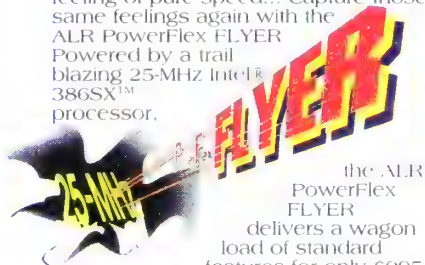
\$995
25-MHz NEW Intel
386SX
60-MB Disk
Super VGA
Upgradeable



Introducing Your Next.



Remember how exhilarated you felt zipping down O'Grady's hill in your new, red FLYER wagon... the wind shooting past your face... that heady feeling of pure speed... Capture those same feelings again with the ALR PowerFlex FLYER. Powered by a trail blazing 25-MHz Intel 386SXTM processor.



Using Intel's fastest 386SX processor, the ALR PowerFlex FLYER outpaces higher priced 16-MHz 386SX PCs by more than 56%. Imagine flying through your WindowsTM applications without having to wait for your PC to catch up.



And with the ALR PowerFlex FLYER, you can face the future without fear. Because of an advanced modular design, you can replace the 386SX processor with a more powerful 486SXTM CPU whenever your comput-

ing needs change. You'd normally have to pay hundreds (or thousands) of dollars more to find this feature in a competitive system.

Visit an ALR reseller today, and find out what it's really like to fly. But you better hurry. At this price, the ALR PowerFlex FLYER is selling as fast as it runs.

For the name of the ALR reseller nearest you call:

1-800-444-4ALR

PowerFlex Family Awards



System Shown with optional monitor



ALR
Advanced Logic Research, Inc.
9401 Jaramillo
Irvine, CA 92718
TEL: (714) 581-6770
FAX: (714) 581-9240

Available at these nationwide locations:

ComputerLand

Connecting Point

ENTRE

FWP BUSINESSLAND

STOCK

ALR Power Partner Resellers

PUTTING A DAMPER ON THAT OLD TEAM SPIRIT

Worker-manager teams may violate labor law—letter and intent

In the 1980s, hundreds of U.S. companies reorganized around teams of workers to tap their employees' knowledge. Motorola, Cummins Engine, Ford, and LTV, among others, found that letting workers make key decisions—not just follow a boss's orders—spurred productivity and quality. Now, an unsettling question has arisen in a case the National Labor Relations Board (NLRB) will soon decide: Do teams violate federal labor law? This has big business as steamed up as it has been in years over an NLRB issue.

The case involves a small electrical parts maker in Elkhart, Ind., called Electromation Inc. In late 1988, after a year of heavy losses, management skipped wage hikes for its 200 workers. When employees objected, the company set up committees—each with up to six hourly workers and one or two managers—to deal with problems such as absenteeism and pay scales for skilled workers. Soon after, the Teamsters began an organizing drive at the company—and filed an NLRB objection to the committees. In 1990, an NLRB judge ruled that Electromation had violated the Wagner Act—the National Labor Relations Act of 1935.

Employers have been floored by the judge's ruling, which will only apply to other companies if affirmed by the full board. Electromation's committees were the same as those at many companies. So if the former are illegal, the latter likely are, too. "One of Motorola's basic principles is participative management, which

has grown into a focus on teams," says Motorola general counsel Richard H. Weise Sr. "We're concerned about any encroachment on one of our basic quality" approaches.

PAPER TIGERS. The issue is a dilemma for the NLRB. The Wagner Act seems to prohibit many team activities (table). But that wasn't its intent. Rather, it was meant to keep companies from setting up sham unions that undercut legitimate ones, a common 1930s maneuver. Business argues that the law doesn't allow for the recent growth in cooperative labor-management relations and therefore shouldn't apply.

Some of management's fears may be overblown. Even the AFL-CIO says the law doesn't prohibit problem-solving teams, a common type (table). The reason: Those teams usually deal only

with their own jobs, not with those of other workers, as Electromation's.

But what of teams that have a broader impact? Labor's position is simple: Management can suggest, but employees set them up. But it should not form or direct them—unless workers agree. "Having management on both sides is what the law is designed to prevent," says Larry Gold, the AFL-CIO's general counsel.

If his view prevails, unionized companies probably wouldn't be able to since many unions already have proved of teams. But nonunion companies could suffer. Unions could file NLRB complaints over teams during organizing drives. And management might have to choose between facing this legal challenge or inviting in a union.

In fact, unions may emerge with a stronger hand no matter what the NLRB decides. For instance, in a case filed with the board, the U.S. Chamber of Commerce suggests a new standard that looks at an employer's intent in forming teams. The idea, which has been suggested in rulings by the Second Circuit Court of Appeals, is that the NLRB would only come down on companies that set up teams mainly to manipulate employees or oppose a union.

Arnold E. Perl, a Memphis lawyer who wrote the Chamber brief, argues that a union would meet labor's objections. He concedes, however, that it could have unintended consequences. For instance, if a union mounted an organizing drive, a company would have to make sure that it didn't oppose the union at team meetings. Otherwise, a judge might find that the company's intent in running its teams was suspicious.

Even most business groups don't expect the NLRB to outlaw teams. Instead, they might suggest guidelines for when the O.K. Either way, the board's decision is likely to be appealed to the U.S. Supreme Court. And companies with teams may go worrying for years.

By Aaron Bernstein
New York

WHAT'S A TEAM?...

There are several types of teams. Here are three of the most common

PROBLEM-SOLVING

Usually 5 to 12 volunteers who meet a few hours a week to discuss ways of improving quality, efficiency, and work environment. They don't implement the ideas

SPECIAL-PURPOSE

May design and introduce work reforms or new technology, or meet with suppliers and customers. In union shops, labor and management collaborate at all levels

SELF-MANAGED

From 5 to 15 workers who learn all production tasks and rotate from job to job. Teams do managerial duties such as schedule work and order materials



...AND WHEN IS ONE ILLEGAL?

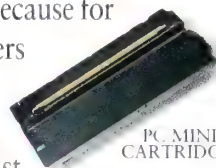
The National Labor Relations Act of 1935 seems to forbid many work teams:

- ▶ 'It shall be an unfair labor practice for an employer to dominate or interfere with the formation of any labor organization or contribute financial support to it'
- ▶ A 'labor organization' is 'any organization of any kind, or any employee representation committee which exists for the purpose of dealing with employers concerning grievances, wages, hours of employment, or conditions of work'

DO A MILLION PEOPLE COUNT ON YOU?



Then you know what it's like to be a Canon personal copier. That's because for years, over a million customers have relied on Canon for crisp, clean copies.



PC MINI CARTRIDGE

They've also come to trust their personal copiers because they're virtually maintenance free, since everything that could run out or wear out, the toner, drum and developer unit, is in our exclusive single cartridge.

So if you're looking for the brand that's been #1 nine straight years and sold over a million, call 1-800-4321-HOP.



PC-1 PERSONAL COPIER

We'll tell you about our full line of personal copiers, from basic to feature-packed models. After all, a lot of people are counting on you, too.



The Clean Earth Campaign



Enjoy easy extended payments with the Canon Credit Card. Ask for details at participating Canon dealers and retailers. Availability only in U.S.

© 1992 Canon USA, Inc. Home Office Products Division, One Canon Plaza, Lake Success, NY 11042

Canon

HEALTH CARE REFORM: IT'S INSURER VS. INSURER

They want to derail big change but can't agree on smaller plans

At a command post in a Marriott hotel outside Washington, D.C., 150 members of the National Association of Health Underwriters gathered in late March to make plans for what promises to be a long battle. Their marching orders: Whip up grass-roots support for the private health care system. Their artillery include a video promoting the virtues of private health care to show to anyone who'll watch and tips on convincing the local press and legislators that a government-run system would be a disaster. "Our best weapon is the consumer," says Joseph L. Pugh, an insurance agent in Gulfport, Miss. "We hope that they'll put pressure on their lawmakers."

The NAHU campaign is just part of a multimillion-dollar lobbying and public-relations blitz by the insurance industry aimed at fending off a major overhaul of the nation's \$700 billion health care system. To insurance companies, the outcome of this war is as crucial as Normandy was to the Allies. As medical costs soar, so does support on Capitol Hill for legislation that would imperil private medical coverage.

MARKET APPROACH. Indeed, that threat is prompting a deep, behind-the-scenes fissure in the once smug insurance industry. Most insurers concede that some kind of reform is necessary and inevitable. But since any change is likely to lead to an industry shakeout, factions are squabbling over the shape of the overhaul. Some small companies are likely to go under if major reforms pass.

Health insurers are united on one thing, though: They oppose the two farthest-reaching reform blueprints, both offered up by congressional Democrats. One would institute a government-run health care system; the other would require employers to cover workers or pay a tax into a fund for the uninsured and



JENCKES: "WE WANT TO TAKE THE ISSUE TO THE AMERICAN PEOPLE AND LET THEM DECIDE"

would set national fees for providers, which insurers fear would lead to premium setting. Insurers have hired a dozen high-powered public-relations firms to stir up public opposition to both ideas.

Instead, like the Bush Administration, the industry prefers a market-oriented approach. The Health Insurance Association of America (HIAA), which represents 300 commercial insurers, is behind what is by far the largest lobbying effort. It's spending \$4 million on its "Campaign to Insure All Americans." A key piece of its attack are polls conducted by a team

of Democratic and Republican polls showing that 59% of respondents favor a system of private insurance. The trade group has publicized the results in newspapers and distributed them at statehouses and on Capitol Hill. "We want to take the issue to the American people and let them decide," says Linda Jenckes, vice-president of the HIAA.

The industry group also is asking employers to appoint an employee as a health care campaign coordinator. These employees would encourage colleagues and business associates to lobby state and federal legislators and candidates for office. The goal is to convince Congress that the public doesn't want radical intervention.

'FAX ALERTS.' The trade group hopes to defuse a congressional overhaul by opposing state-level changes aimed largely at reforming coverage for small employers. These small-group market reforms would end the practices of some insurers that have profited by cherry-picking the healthiest groups from a community insurance pool. That has left small companies with sick workers unable to obtain affordable insurance. The industry would bar insurers from denying coverage to any group that wants it, from dropping sick individuals in a group, or from widely varying premiums between low- and high-risk companies.

The 50-state strategy is notching up some successes. Fifteen states have already passed small-group market reform. In March, the Florida insurance lobby organized small businesses to push its bill. At key moments, the HIAA sent out "fax alerts" to small employers who called legislators using a toll-free line set up by the lobby. They swamped the coalition of senior citizen groups and labor that was pushing for a state government takeover of the system.

The industry's use of small employers in Florida is typical of the way insurers exploit relationships they have developed

with other businesses. Insurers have joined hospitals, drug, and technology manufacturers in the Healthcare Leadership Council, which lobbies for private approaches to reform. The council's president is also a co-founder of the Healthcare Equity Coalition League (HECL), which includes health care companies and small businesses. HIAA is unleashing a grass-roots campaign to convince small companies, arguing that the Democratic

REFORM SPLITS THE INSURANCE INDUSTRY

WHAT MOST COMPANIES AGREE ON

- ▶ No U.S. price controls
- ▶ No state laws mandating specific benefits
- ▶ State reforms prohibiting insurers from turning down small employers that want insurance
- ▶ State reforms stopping insurers from charging high premiums to small firms with sick workers
- ▶ Malpractice reforms

WHAT SOME LARGE INSURERS ALSO BACK

- ▶ Federal reforms regulating insurance sold to small employers
- ▶ Federal certification of managed care networks
- ▶ Use of co-ops to buy coverage for small employers

WHAT SOME SMALL COMPANIES OPPOSE

- ▶ Any reforms regulating insurance sold to small employers

We took the starch out of business banking.

These days, business bankers cannot afford to be inflexible, dyed-in-the-worsted-wool bureaucrats.

There's simply not enough time for repetitiously redundant rehashings of given scenarios. Or layer after layer after layer after layer of approvals. Or, for that matter, ad copy that takes its own sweet time to get to the point.

Well, the point is, Continental bankers are more efficient.

More effective. More aggressive.

You see, we've loosened our collars and rolled up our sleeves. We've learned to look out for you, to anticipate your needs, instead of worrying about how we look to ourselves.

Part of it's our Midwestern no-nonsense, common sense disposition. And part of it's our powerful work ethic. But what it all boils down to is that we're able to give you precision-crafted, customized business banking products—exactly when, and in many cases before you need them.

In fact, to prove it, we'll be contacting you soon. You'll discover that with plain talk, common sense and a little elbow grease, we can iron all of your problems out.



Continental Bank

Anticipating the needs of business.™

Because

S M

Introducing the

AT&T PARTNER

*Small
companies
come in
all sizes.
One calling
plan could
never fit the
needs of
every one.
So we've
created many
plans for
small
businesses.
Including one
for yours.*

AT&T PARTNERS IN BUSINESS PLAN

*Introducing a new calling plan that
provides two ways to save your
business 20%.*

✓ New AT&T Partners in Business Option. Give AT&T a list of 20 of your most frequently called domestic customers, suppliers and associates. If they are AT&T customers, you'll get a 20% discount. And, for international calls receive a 10% saving on the country of your choice during the standard rate period.

OR

✓ save with the Area Code Option. Receive a 20% discount on the calls made to your highest billed area code, automatically. Plus, with the International Business Alternative you can get a discount on, short duration international calls and faxes.

AT&T PRO[®] WATS

*Introducing the new AT&T PRO WATS
Term Plan. Sign up for 18 months and
receive an extra 5% discount.*

- ✓ For businesses that spend over \$50 a month on long distance.
- ✓ The Term Plan can give your business extra 5% saving in addition to the average daytime discounts of 4% to 18%.
- ✓ The more you call, the larger the volume discount. Automatically.
- ✓ And, for international calling, the PRO Term Plan gives you an extra 5% discount international calls in addition to AT&T PRO WATS discounts.

ALL *comes in many sizes*

BUSINESSSM PROGRAM.

AT&T CustomNetSM Service

Sign up by July 20 and select AT&T as your primary carrier and receive extra discounts for the first three months.

Plan for companies with multiple locations that combines long distance charges on a bill for maximum savings. Combines from up to 70 business locations and 10 international locations.

Sign up now and receive an additional 10% discount on the calls made to your highest billed area code and a 5% discount on qualified international calls. Offer ends July 20.

Regular discounts to fit your needs: 10% on standard monthly usage over \$200. 12% for over \$2,000. And a 10% discount on calls to the highest billed area code.

And, with an 18 month CustomNet Term Agreement, receive an additional 5% discount.

AT&T INTERNATIONAL CALLING OPTIONS

Now, no matter which AT&T Long Distance calling plan you have, you can save on international calls.

✓ With AT&T Partners in Business Option save 10% on international calls to the country of your choice.

✓ With the AT&T Area Code Option you can get the International Business Alternative and receive a discount on short duration international calls and faxes.

✓ The Favorite Nation Option, available with PRO WATS, gives an extra 10% discount on most international and AT&T Corporate Calling Card calls made during the standard rate period to the eligible country of your choice.

✓ Sign up for AT&T CustomNet Service by July 20 and receive an extra 5% discount on qualified international usage.



AT&T

The right choice.

One size does not fit all. Call 1 800 222-0400.

Government

tax plan would drive many of them out of business.

The insurers' influence in the Business Roundtable has paid off, too. The BR, which includes large companies hammered by huge medical bills, has released its own reform principles. On the list is support of the managed care networks large insurers run that scrutinize doctors' and hospital practices. The chairman of the group's task force: Prudential Chairman Robert C. Winters.

BLACK EYE. It's that kind of offensive, though, that's dividing the industry. Larger companies are behind the push for small-market reform. If small, aggressive insurers can't skim off the best risks, larger companies could reenter this market. They also complain that cherry-picking, which has left many middle-class workers without coverage, has given the industry a black eye—just when it needs public support. "The public thinks the insurance industry will take care of itself before it takes care of its customers," says Robert L. Laszewski, executive vice-president of Liberty Mutual Insurance Co.

Large companies also differ with the HIAA over its state strategy. Hoping to help shape reform, they're backing a

push by Senate Finance Chairman Lloyd Bentsen (D-Tex.) for legislation to reform the small-group market. If his bill comes up this year, they'll be fighting the HIAA, which fears that the bill could become the vehicle for price controls.

Some small companies are fighting back. On Apr. 22, 13 insurers were set to announce the formation of the Council for Affordable Health Insurance, which

'The public thinks the industry will take care of itself before it takes care of its customers'

will resist small-market reforms. They argue that these changes, by requiring coverage of sicker workers, will raise premiums for small companies. "The lady at the cleaning establishment can't afford insurance now," says Paul Durrant, president of the Universe Life Insurance Co.

Another crack in the industry has appeared over the push for managed care.

Many insurers can't create the huge works that industry titans offer. But "Gang of Five"—CIGNA, Prudential, Metropolitan Life, Aetna, and Traders—have been meeting privately ways to promote these networks as part of any federal reform package.

Blue Cross & Blue Shield even supports the idea of requiring that health care be provided by government-certified networks. A recent Blue Cross ad went so far as to promote the notion that "the government should play a regulatory role." Some Gang of Five members find this appealing, too. If health care is to remain private, "substantial reforms must take place in the delivery of medical services," says Paul P. Cooper III, a vice-president at Prudential.

For now, the assault by the insurers appears to be paying off. Democratic proposals to overhaul the system stalled on Capitol Hill. And more moderate ideas such as managed care and medical practice reform are gaining currency among lawmakers on both sides of the aisle. But no matter how the debate plays out, one thing is clear: The health insurance industry will have to change or there won't be an industry left at

By Susan B. Garland in Washington

YOU CAN'T GET AWAY FROM US.

No matter where in the world you need business insurance, The Home can help.

Because business is getting more and more international, so is The Home Insurance Company. We're now an integral part of the Trygg-Hansa SPP Group, one of Europe's leading insurers. And we have agreements with major insurers around the world. The result is, one Home underwriter can handle virtually all your property-casualty insurance in most of the world's key markets. Ask your agent or broker.

Home Insurance
OLD PROS ON A NEW TEAM



If you picture yourself owning a GM vehicle, GMAC announces an alternate way to do it

If you're a GM car or truck buyer who wants ownership *plus* low regular monthly payments, you may want to give GMAC SMARTBUYSM a shot.

SMARTBUY is a new purchase plan* that gives you *another* way to own a car. Like conventional financing, you own the vehicle, so the title is in your name. But what makes SMARTBUY different is that at the end of your contract you have several choices. You can make a final SMARTBUY payment, which is larger than your regular monthly payment. You can refinance. Or return the vehicle to the dealer†. It's your decision.

If you're thinking about buying a GM car or

truck, then picture yourself with more money to spend each month and a new vehicle every few years. Because, with SMARTBUY, that's exactly what you'll get.

See your GM dealer for details. And set your sights on GMAC SMARTBUY.

*SMARTBUY is not available in Nevada. Available with modifications in Maryland, North Carolina, New Jersey, Pennsylvania and Washington, D.C. Limited availability in Arkansas. †If vehicle is returned to dealer, purchaser is liable for excess use, wear, mileage and a \$250 disposal fee.

GMAC SMARTBUYSM

Chevrolet • Pontiac • Oldsmobile • Buick • Cadillac • GMC Truck

THIS MONTH'S SPECIAL: SOVIET TECHNOLOGY

The West is snapping up Russian products and talent—cheap

It was once a high temple of Soviet research. The Kurchatov Institute of Atomic Science, a sprawling complex shrouded by birch trees in Moscow, employed the sharpest—and most pampered—scientists in the land. Some 10,000 of them turned out world-class work in diamond-coating, thermonuclear fusion, and nuclear-reactor technologies. Thanks to the meltdown of the Soviet empire, however, the institute has been reduced to hawking its services to Western companies at fire-sale prices. "At present, the government has no money to support us," says nuclear power specialist Semyon D. Malkin, a senior researcher at Kurchatov.

These are humbling times for Russia's once-mighty science establishment. Cast adrift by their nation's breakup, top researchers are trying to spin their expertise and technology into hard currency. This trend presents a unique chance for U.S. companies and government agencies to gain a competitive edge. Some Russian items, such as compact nuclear reactors for powering satellites, aren't available in the West. In other cases, the allure is simply that "their prices are ridiculously low," says Roald Sagdeev, former director of the Space Research Institute in Moscow and now a physics professor at the University of Maryland.

The Russians see plenty of reasons to sell out. At Kurchatov, for instance, the rent, heat, and electricity bills

alone have gone up more than tenfold since last year. By peddling everything from rockets to high-tech ceramics, the scientists can keep their research alive. Yet, some critics are wary of the emerging techfest. Pentagon hard-liners worry that by funding Russian brainpower, the West could be aiding a potential adversary should despotism reemerge. Experts also fear that a flourishing high-tech trade could help Third World

tyrants obtain military technologies much of what the Russians have for sale. "I feel we should do nothing that fosters the proliferation of high-tech weapons throughout the world," says Deputy Defense Secretary Donald Atwood.

Despite such concerns, a number of U.S. companies are eagerly shopping in Russia. Loral Corp., a New York-based maker of satellites and defense electronics, said on Apr. 1 that it's negotiating a distribution deal with Fakel Enterprise, a maker of rocket-propulsion systems in Kaliningrad. Loral is acquiring two Fakel's Hall thrusters that use electricity from solar panels and batteries in space, these small rockets help navigate satellites into their appropriate orbits and help keep them there at about one-tenth the cost for conventional chemical-fuel rockets. "These boosters have been flight-tested for 10 years without a problem," says John Kiser, a Washington-based consultant who brokered the deal.

DISCOUNT TOPAZ. Initially holding back, the Bush Administration has jumped in. It recently agreed to spend \$14 million to buy a Russian Topaz space-based nuclear reactor and plutonium fuel. The deal also includes two Hall thrusters that will be studied by NASA and the Defense Dept. At \$8 million, the Topaz, a lightweight nuclear reactor used to power a satellite, is a steal; the U.S. has its own billion-dollar program to develop a space reactor.

Wood says the U.S. and Russia may also undertake joint Strategic Defense Initiative research. "They could become a technological partner in this area," says the Energy Dept. he says to save greenbacks, is spending \$200 million to buy giant Russian magnets for the \$1-billion superconducting supercollider—or a smasher—under construction in Waxahachie, Tex. "They're probably the best in the world," says Kiser.



"NO MONEY": A KURCHATOV INSTITUTE SCIENTIST

RUSSIAN SCIENCE ON THE BLOCK

U.S. companies and government agencies are shopping for technology and talent in the former Soviet Union

SUN MICROSYSTEMS

Hired 50 researchers at Moscow's Institute of Precision Mechanics & Computer Technology to design software and chips

NATIONAL PATENT DEVELOPMENT

Has a joint venture with Moscow's Kurchatov Institute to market diamond-hard coverings for spacecraft, computer disk drives, and other products



LORAL Is negotiating a joint venture with Fakel Enterprise in Kaliningrad to distribute satellite-propulsion systems

UNITED TECHNOLOGIES

Is working with Moscow's Institute of Structural Macrokinetics on new high-strength ceramics technology

U.S. GOVERNMENT

Plans to pay \$14 million for a Russian Topaz space-based nuclear reactor. Also: \$200 million for magnets for use in the superconducting supercollider in Waxahachie, Tex.

DATA: BW, KISER RESEARCH INC



Continental Gives You A First Class Seat For The Price Of Unrestricted Coach.

An unrestricted coach ticket on some airlines gets you a coach seat. But, Continental gives you a First Class seat for the same unrestricted coach fare, to virtually every city we fly to throughout the U.S. And it won't cost a penny more. We'll even confirm your First Class seat as soon as you make your reservation.

Every business day, Continental offers over 14,000 First Class seats from cities throughout the U.S. to get you on your way to over 200 destinations worldwide.

Enjoy greater privacy, special check-in, pre-boarding privileges, sumptuous meals, complimentary cocktails. And all the other accoutrements and amenities that come with Continental's First Class.

You'll also be earning mileage with Continental's OnePassSM—the frequent flyer program voted #1 in the business for the fourth consecutive year and the fastest way to earn free travel. If you're not already a member, you can enroll when you make your reservation.

Call your travel agent or corporate planner. Or call Continental Airlines at 1-800-525-0280. And just ask for Continental's A-Fare.

© 1992 Continental Airlines, Inc

Continental



One Airline Can Make A Difference.SM

available on most flights, to most mainland U.S. cities except between LaGuardia/Newark to Houston, or between Los Angeles, San Francisco, Washington National or Boston airports to Houston.

world at making these magnets," says Joseph R. Cipriano, director of Energy's Super Collider Laboratory, which had been planning to build such magnets domestically.

In the meantime, United Technologies Corp. and Spain's National Institute of Industry have linked up with Moscow's Institute of Structural Macrokinetics to explore the commercial potential of Russian methods for making materials. The center boasts a combustion-synthesis method that uses intense temperatures to turn out heat- and abrasion-resistant ceramic powders that go into coatings for spacecraft and military hardware. "The Soviets have always managed to produce these items in a far more economical manner" than UTC has, says Michael Werle, director of technology resources at the company.

'FIRE SALE.' American companies have also started buying Russian brainpower, often at astonishingly low prices. General Atomics, a privately held San Diego physics research company that is an Energy Dept. contractor, recently hired the Kurchatov Institute—for \$90,000—to conduct a year's worth of hot-fusion energy experiments using its world-class Tokamak reactor. That's enough to pay most of the institute's large staff for a month, but by Western standards it's a paltry sum. "Right now, it's a fire sale," says Rush Holt, assistant director of Princeton University's Plasma Physics Dept., where spending on hot fusion runs \$110 million a year.

So opportunism is in. Sun Microsystems Inc. in February hired super-computer guru Boris A. Babayan and 50 specialists at the Institute of Precision Mechanics & Computer Technology to take advantage of their expertise in software. "We can get a team of people for what it would cost for one or two over here," says David R. Ditzel, who heads Sun's research unit.

Such bargains may not last forever, as the rest of the world gets a yearning for Russian smarts. The French, for example, recently hired Russian scientists to evaluate the Hermes manned space shuttle. And the Russian scientific establishment will become more savvy. On Apr. 7, scientists at the Kurchatov Institute formed a joint venture with New York-based National Patent Development Corp. to market such technologies as diamond-hard coatings for military hardware. Kurchatov's Malkin reckons the deal may eventually generate hundreds of millions in revenues. But until then, he and others will take whatever they can get.

By Bruce Berman in Washington, with Deborah Strad in Moscow and Russell Mitchell in San Francisco

MAYBE THEY SHOULD CALL IT THE ARMS BIZARRE

As director of the U.S. Defense Intelligence Agency in the late 1980s, Lieutenant General Leonard H. Perroots kept cordial but aloof relations with Soviet military leaders. So it was with some trepidation, in April, 1990, that he knocked on the door of the Soviet military attachés' building in Washington—to be greeted by some stunned hosts. Perroots, by then retired and the president of a private military-research company called Group Vector, was shopping for some Soviet missiles. "It was a bit of a shock on both sides," he recalls.

The offer wasn't as odd as it sounds. Among other pursuits, Vector, a \$68 million company formed in 1984 by missile expert Donald G. Mayes, buys missiles, removes their warheads, adds test circuitry, and sells them to the U.S. Navy to use for target practice. Foreign missiles tend to be cheaper than U.S. systems, so Vector often shops abroad. After two years of bargaining, over dozens of shots of vodka, Vector is closing in on its deal: a five-year, \$100 million-plus contract with the Russian Defense Ministry for more than 150 advanced sea-launched missiles now in stockpiles. Russian Deputy Prime Minister Yegor Gaidar has approved the sale, which awaits President Boris Yeltsin's signature.

SPARE PARTS. How did Vector get this far? The answer seems to be good connections and great timing. Perroots knew the Russian military brass. And Vector's international director, a Greek named Steve Stylianoudis, had, as an independent dealer, brokered sales of Russian spare parts to Arab buyers. The Soviet military's precarious financial position helped—as did the warming in superpower relations. "If I thought there was a chance our two countries would go to war, I would not be doing this," says former Russian Defense Attaché Major General Grigoriy D. Yakovlev of his dealings with Perroots, whom he now calls Lenny.

Pentagon officials, who would have been rebuffed if they had approached Moscow directly, are delighted. "Demonstrating the capability of your combat system against the actual threat of far greater value [than simulated testing]," says a Defense Dept. official who worries that the weapons might someday be a danger once again. Vector will ready the missiles and the launchers so that the Navy can use them as clay pigeons on its test range.



VECTOR'S PERROOTS: SELLING RUSSIAN MISSILES AS CLAY PIGEONS

off the Atlantic and Pacific coast. The missile deal is opening other Russian doors, some of which will expand Vector's range of businesses. In its traditional arena, Vector recently got rights to market a combat helicopter built by Kamov Helicopter & Scientific Technology Co., a Russian armaments maker. Vector expects to sell some of the choppers to the Pentagon. But "sales will be modest," says founder Mayes, Vector's executive vice-president, because of concern about Kamov's ability to provide spare parts and service.

Moving beyond its role as an arm broker, Vector is discussing a nuclear waste-cleanup project with officials in Moscow and negotiating a three-way joint venture with an Italian company to develop a global navigation system based on Russian and U.S. satellite technology. A Vector subsidiary is also helping the Russian government transform Archangelskoe Palace outside Moscow into a deluxe hotel. Vector will co-own the 35-acre estate and manage the renovation, which will include—going ready—a casino.

By Amy Borrus in Washington

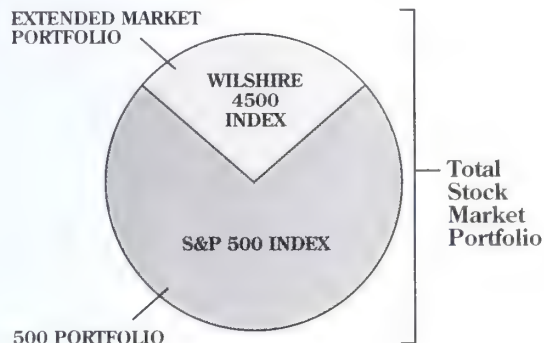
INTRODUCING THE FIRST INDEX PORTFOLIO TO TRACK THE TOTAL U.S. STOCK MARKET.



Vanguard is pleased to introduce a new mutual fund for today's investor: Vanguard Index Trust—Total Stock Market Portfolio.

As the name suggests, the Portfolio seeks to reflect the performance of the *total* U.S. stock market—as measured by the Wilshire 5000* the broadest stock market index in the U.S. It includes all U.S. securities traded on the New York Stock Exchange, the American Stock Exchange, and the NASDAQ Over-The-Counter Market.

Total U.S. Stock Market/ Wilshire 5000 Index



Vanguard pioneered the concept of indexing for the individual investor in 1976 with the introduction of Vanguard Index Trust—the world's first index mutual fund. The Total Stock Market Portfolio has been added as the third portfolio of the Trust, which also offers the 500 Portfolio (consisting of all S&P 500 Index** stocks) and the Extended Market Portfolio (tracks the Wilshire 4500).

*"Wilshire 5000" and "Wilshire 4500" are registered trademarks of Wilshire Associates.

**"S&P 500 Index" and "500" are registered trademarks of Standard & Poor's Corporation.

The Advantages of Indexing

Indexing is becoming more and more attractive to individuals—especially retirement investors—seeking long-term growth of capital and income. And for good reasons:

Relatively Predictable Performance.

There's no such thing as a "risk-free" fund, and the stock market itself has been, and will remain, unpredictable. However, regardless of which way the market turns—up or down—the Total Stock Market Portfolio can be expected to correspond closely with the returns of the Wilshire 5000, our target index.

Broad Diversification. The Total Stock Market Portfolio will hold approximately 1,500 stocks found in the Wilshire 5000.

Low Cost. If you're trying to match a market index, which does not have expenses, costs must be kept low. And Vanguard Index Trust does just that. We do not pay investment advisory fees, portfolio turnover is low, and we keep each Portfolio's operating expenses as low as possible, passing the savings on to the shareholders.

You can enjoy other Vanguard advantages as well, among them:

- No sales commissions or "12b-1" fees. Share purchases include a 0.25% transaction fee, paid to the Fund, to help offset the cost of investing new cash flow into small company stocks.
- \$3,000 minimum initial investment, \$500 for IRA, SEP and Retirement Plans.

**For A Free Indexing
Information Kit
Call 1-800-635-9998.**

The Kit includes a prospectus with more complete information on the transaction fee, distribution charges and other expenses. Please read it carefully before you invest or send money.

THE Vanguard GROUP
OF INVESTMENT COMPANIESSM



PS/2

Tests were conducted against the PS/2 Model 57 SX without IBM 386SLC processor. In Canada, call 1 800 465-1234. IBM, Personal System/2 and PS/2 are registered trademarks of International Business Machines Corporation. ©1992 IBM Corp.

It blows everything else out of the water.

With our new IBM 386SLC processor, the new PS/2® Models 56 and 57 SLC are really making waves. They're faster than any 386 SX computer you can buy—up to 88% faster, to be precise.* They're even faster than most 386 DX systems.

Both models are completely upgradable, to help protect your investment. They're also completely compatible with your existing hardware and software. So in stand-alone or connected environments, about the only thing that changes is how much faster you can get things done.

The new Personal System/2® Models 56 and 57 with IBM 386SLC processor. So fast, you could say other computer companies have missed the boat. For more information, see your IBM authorized dealer. For the dealer nearest you, call 1 800 942-4-IBM, ext. 386.**

Introducing SLC in the new PS/2 Models 56 & 57.

- *Faster than any 386 SX computer you can buy.*
- *Faster than most 386 DX computers.*
- *New 386SLC processor with 8K internal cache.*
- *4MB memory; 80 or 160MB hard drive, up to five slots/four bays.*
- *Supports 3.5" and 5.25" diskette drives.*



Developments to Watch

EDITED BY FLEUR TEMPLETON

A NEW RECIPE FOR PLASTIC— HOLD THE PETROLEUM



Plastic doesn't grow on trees. But it may grow in plants—well, almost. In a project funded by the Energy Dept., scientists at Rensselaer Polytechnic Institute in Troy, N. Y., have developed a process to convert oil from vegetables, such as soybeans, into water-resistant plastic that sticks to materials like wood and aluminum.

"This is cost-effective," says Rensselaer chemist James Crivello, "as one doesn't have to rely on petroleum." Nontoxic, photosensitive salts developed at RPI are key to the process. The salts are added to chemically altered, or epoxidized, oil. When the mixture is exposed briefly to ultraviolet light, the salts produce an acid that catalyzes the conversion of the oil into solid plastic.

Crivello says the process could also be used to make coatings and adhesives from vegetable oils. Alcoa Laboratories is already testing a coating for lining aluminum food containers.

FINGERING A GENETIC CULPRIT IN DIABETES

The DNA sleuths have collared yet another important gene. This one identifies a mild but prevalent form of diabetes known as Type 2, which afflicts more than 11 million Americans. Type 2 diabetes is commonly controlled with drugs or diet rather than with insulin therapy. While researchers have known for years that some versions of the disease are inherited, the finding fingers the exact genetic cause.

Scientists at the University of Chicago and two French institutes studied families with the disease to locate the common segment of faulty DNA. The gene's identity, reported in the Apr. 23 issue of the journal *Nature*, was a minor surprise: Many scientists expected to find the flaw in insulin receptors, proteins that switch on a cell's sugar-breakdown mechanism in response to insulin. Instead, the culprit in up to a third of hereditary cases is a faulty enzyme that normally catalyzes the first step in the sugar-breakdown process. In addition, preliminary results show that the same enzyme might be to blame for noninherited, later-onset Type 2 diabetes.

Researchers are now racing to identify two other genes that may also cause the disease. Meanwhile, the current finding should lead to better treatments. "I suspect the drug companies will jump all over this one," says the University of Chicago's Graeme I. Bell, who led the gene-sleuthing team.

PLANET-FRIENDLIER PRODUCTS, THANKS TO A PROTEIN

A Harvey (Ill.) startup says it has found a way to help makers of household products, such as detergents and paints, eliminate tons of nonbiodegradable waste. Donlar Corp. is pushing polyaspartic acid as an alternative to polyacrylic acid, a key ingredient in many household items. Polyaspartic

acid, a protein derived from the same family that forms shells, is broken down by bacteria in water-treatment plants.

Building on the research of two professors from Clemson University and the University of South Alabama, Donlar has patented a process to make large quantities of the substance. First, it heats aspartic acid—a protein building-block—around 400°F. This causes the chemical to polymerize, or form long chains of itself. Next, the chains are added to a chemical base, triggering a reaction to create polyaspartic acid.

Some 25 chemical and consumer-products companies are evaluating Donlar's new product. At \$2 to \$5 a pound, protein costs twice as much as polyacrylic acid. But Donlar hopes that environmental benefits will help it corner a portion of the estimated \$2 billion market for polyacrylic acid.

AN OCTANE TEST THAT SAVES A BUNDLE? DON'T KNOCK IT

Getting the right octane level in gasoline—a key to engine performance—is costly for refiners because of the inaccuracy of current evaluation methods. To ensure compliance with federal regulations, refiners often add more octane than really needed. Now, Ashland Petroleum Co., of Ashland, Ky., has a process that adjusts octane during blending.

Currently, refiners measure octane levels in a finished fuel by determining how much a special test engine "knocks" during combustion. The new procedure—dubbed InfraTane—studies gasoline under near-infrared light. Different molecules absorb light at specific frequencies, so by measuring the amount of absorbed light refiners can evaluate octane levels and adjust them on-line to achieve the proper mix.

Ashland has installed this system in its St. Paul Park (Minn.) refinery and estimates InfraTane will save at least \$1 million a year there by setting octane levels more accurately. And Ashland has licensed InfraTane to Fluid Data Inc. of Merrick, N. Y. Initial costs to other refiners are around \$300,000.

A BACKSEAT DRIVER YOU COULD GET TO LIKE

It's still not possible to switch to autopilot and catch a few winks while driving. But a new system from Mitsubishi Motors Corp. lets a computer lend a hand when the going gets tough.

Called Invecs, short for Intelligent & Innovative Vehicle Electronic Control System, it relies on "fuzzy logic," a form of software that allows computers to deal with ambiguity (BW—Apr. 6). Sensors detect when driving conditions change, and a microchip adjusts the gears and the speed. Rounding an uphill turn? The controller keeps the automatic transmission in low gear as long as the car needs it—not just for a preset period, the way cruise-control systems do.

And if a driver hits a tight curve in the rain too fast, the computer will prevent a spinout by first reducing the power to the drive wheels, then adjusting the rotation speed of the front and rear wheels to match the radius of the turn. Mitsubishi will first offer Invecs in a new subcompact soon to be launched in Japan.



**OPEN IN CASE YOU WANT THE
DIFFERENCE 50% OF THE
FORTUNE 500 HAVE CHOSEN.**

We stand ready.
We have for 128
years.

With assets that have
reached over \$50 billion.
And with the real Travelers
difference... 33,000 employees
dedicated to customer
satisfaction.

This is how we make a real differ-
ence for you.

By identifying ways of preventing
losses and controlling insurance costs.

By ensuring the health of your work force
with one of America's largest managed care
networks.

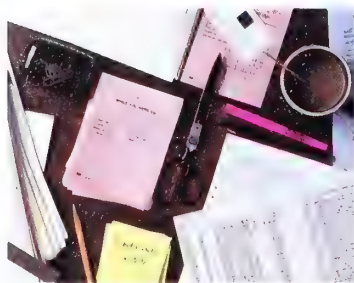
By providing you with a full portfolio of
pension investment options and flexible
record-keeping services.

By making sure that those who carry The
Travelers for their business insurance needs
do so with confidence.

That's The Travelers Way.

TheTravelers

You're better off under the Umbrella.®



**This year,
83,329 pieces of paper
will cross the average
executive's desk.**

**Fortunately, this is
no average desk.**



It's a Mueller® Provincia desk by Haworth. And uncovering its rich wood finish is a gratifying reward for reaching the bottom of a long day's paperwork. ▼ Still, Haworth desks are better known as a reward for reaching the top. In fact, they've been a symbol of success for over 40 years. ▼ Isn't it time you and Haworth crossed career paths? For more information about our company and our complete line of office furniture, call Laura Cramer at 1-800-344-2600.

HAWORTH WORKS FOR BUSINESS.

HAWORTH®

THE BUSINESS OF THE PGA TOUR





According to J.D. Power and Associates,
the Town & Country has the
best customer satisfaction ranking of any minivan.
By a very comfortable margin.



The American family never had it so luxurious. An abundance of rich leather.

Power windows and door locks. And the American family never had it so safe.

With a driver's minivan air bag.* Anti-lock brakes. Or the available all-wheel drive.

It's no wonder Town & Country

owners are more satisfied

than any other minivan

owners in the world! And for 1992,



we now offer the Owner's Choice Protection Plan. Choose between a 3-year/36,000-mile bumper-to-bumper warranty or a 7-year/70,000-mile powertrain warranty.^{††} Oh, and did we mention the added incentive of \$500 cash back. For information, call 1-800-4A-CHRYSLER.

ADVANTAGE: CHRYSLER 
A DIVISION OF CHRYSLER CORPORATION



OFFICIAL SPONSOR
OF THE 1992 U.S.
OLYMPIC TEAM

THE BUSINESS OF THE PGA TOUR

INTRODUCTION

By James R. Utaski

*Corporate Vice President for Business Development
Johnson & Johnson*

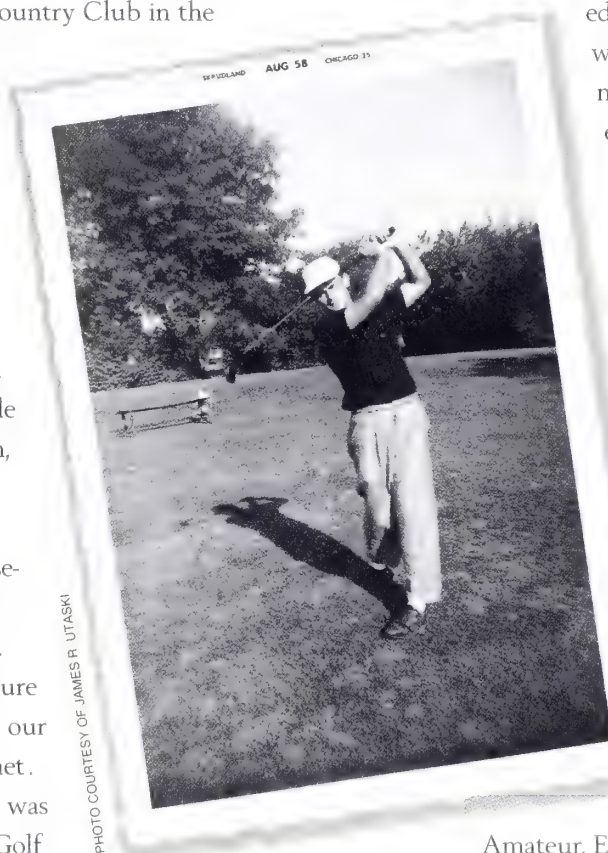
Golf changed my life when I was just a boy. Growing up in the 1950s, I fell in love with the game and the people who played it. I spent long hours on the manicured fairways at Itasca Country Club and Medinah Country Club in the suburbs of Chicago. No, my father wasn't a privileged member. He was a printing pressman, the son of immigrants. My mother was a Polish immigrant. We never had the money to join a country club. I learned about golf through the wide eyes of a caddie. While working at Itasca and Medinah, I met men and women of all professions, from surgeons to telephone Kiner, a Hall of Fame baseball player who was with the Chicago Cubs in 1953 to 1954. Working as a caddie was one of the few sure ways I could help make certain our family's financial needs were met. Fortunately for me, Chicago was the home of the Western Golf Association. Since 1899, the WGA has sponsored the Western Open, the PGA TOUR's oldest, continuing championship. Even more fortunately for me, the Centel Western Open and the PGA TOUR also support the Evans Scholarship Program for needy caddies. As a caddie, I earned an Evans Scholarship to North-

western University in Evanston, Ill. For four years, the scholarship paid for my tuition and housing while I concentrated on my studies. I graduated in 1961 with a bachelor's degree in marketing. Two years later, I graduated from Harvard Business School with an MBA. My education and my later success as a business executive would have been impossible without the help of the thousands of golfers and golf fans who support the WGA, the tournament, and the PGA TOUR.

All proceeds from the Centel Western Open, the PGA TOUR's Chicago tournament, go to the Evans Scholars Foundation. Chicago's pride of amateur golf, Charles "Chick" Evans Jr. established the caddie scholarship program in the midst of his successful career. The winner of the 1916 U.S. Open and U.S.

Amateur, Evans had been forced to drop out of Northwestern University after his freshman year due to a lack of funds.

Evans persuaded the WGA to sponsor the program and in 1930, the first two Evans Scholars enrolled at Northwestern. Since then, more than 5,500 caddies have graduated as Evans Scholars. Contrary to public percep-



tion, caddie programs continue to thrive in many parts of the country, and the Evans Scholars Program remains strong. This past year, more than 870 caddies were enrolled as Evans Scholars at 19 universities throughout the country.

In the past 60 years, the Western Open has raised millions of dollars to help send needy caddies to college. In 1991, alone, the Centel Western Open contributed an estimated \$600,000 to the scholarship program. In addition, more than 23,000 golfers nationwide support the Evans Scholars through the WGA's Par Club.

The tournament is one of 118 PGA TOUR tournaments that annually give millions of dollars to charitable causes. In 1991, PGA TOUR, Senior TOUR and Ben Hogan TOUR tournaments raised more than \$24 million for charity. In PGA TOUR history, nearly \$200 million has been raised for charity. No other sport comes close to matching golf in its contributions to helping others.

The story of my rise from a caddie shack to a corporate suite is just one of thousands of real-life stories illustrating how golf and the PGA TOUR have helped others stretch their dreams, overcome adversity, and realize the impossible.

For me as a boy growing up in Elmwood Park, Ill., earning an education at Northwestern and Harvard truly seemed an impossible dream. The Evans Scholars Program, funded by the PGA TOUR's Western Open, opened the doors, not only to a higher education, but also to an enriched life.

At Harvard I had among my classmates and friends the



Former Evans Scholar James R. Utaski credits the PGA TOUR and its Western Open scholarship program with his success in business today.

former senator from Pennsylvania, Jack Heinz, now deceased; Ruben Mark, current CEO of Colgate-Palmolive; and Verne Loucks, CEO of Baxter Laboratories. Many of today's senior executive too numerous to mention, became friends on six years after leaving the caddie shack.

My own career has had a heavy international flavor. I have enjoyed general manager positions in Mexico City, Mexico, and Sao Paulo, Brazil, before Johnson & Johnson

returned my family of five to the United States.

In the U.S. I was head of our Latin American operations at headquarters in New Brunswick, N.J. I later became President of Johnson & Johnson Baby Products Company and eventually Company Group Chairman for domestic consumer products companies. This led to my current Johnson & Johnson position as Corporate Vice President for Business Development Worldwide.

Of course, I have never lost my love for golf or my enjoyment in taking a caddie along. I remember so well the impact a tip and a thank you made when I was a caddie. Most importantly, I remember learning about the Evans Scholars and how the possibility of earning a scholarship to college helped me focus on my school work and activities.

Getting an Evans Scholarship was the first big break in my life. For that opportunity, I join with more than 6,000 Evans Scholars – past and present – in saying "Thank you" to the PGA TOUR players and fans for their role in turning the dreams of young caddies into wonderful realities. ●

SAM GREENWOOD - PGA TOUR

Even On The Golf Course, There Are Constant Reminders Of Philips' Position In The World Of Dictation Systems.



Philips Business Systems Company. Proud Partners Of The PGA TOUR. 

At Philips, we're honored to be associated with the #1 organization in golf — the PGA TOUR. After all, as the worldwide sales leader in dictation systems, we know what it takes to be #1. From our line of portables and desktops to the state-of-the-art digital dictation unit, the Voice System 4000, Philips and

Norelco dictation equipment is designed to help you communicate more effectively. And because we're part of Philips Electronics N.V., the 29th largest industrial company in the world, we can draw on resources that will keep us #1 in the world of dictation. And that's a course we'll never stray from.

For more information, call Philips Business Systems Company at 1-800-445-TALK (Ext. 99). In Canada, call (416) 754-6204.



PHILIPS

IN THE BEST COMPANY

By Mark Soltan

PGA TOUR, RARY HVES



Many leading corporations find golf to be an excellent way to showcase products and entertain clients.

No matter how sluggish the economy becomes, companies still must entertain clients and promote products. According to many executives, there is no better way than the PGA TOUR.

That's why some of the nation's leading corporations — IBM, Coca-Cola, Merrill Lynch, Hilton, MCI, and Buick — use golf as their top source of advertising and diversion. It's wholesome, fun, and accessible, and also establishes a common ground.

Last August, Coke signed a long-term agreement with the PGA TOUR

to underwrite tournament leaderboards and weekly junior golf clinics. Coca-Cola, the official soft drink of the TOUR, is also a prominent sponsor of Major League Baseball, the NFL, NBA, and NHL.

"We view it as another club in our sports bag," said Coke spokesman Bob Bertini. "It compliments our sports very well."

It also stimulates involvement on a local level.

"It affords significant opportunities for our bottlers to tie in at a grass-roots level," Bertini said.

In September of 1991, IBM entered a new three-year deal and became the official computer of the PGA TOUR. Using its new IBM Personal System II, the company provides up-to-the-minute scoring for spectators and the media.

"We want to showcase our technology," said Jim Reilly, general manager of marketing services and communications.

"The media, players, and fans have a real need for our system. We want to show we care about their sport. If we can leverage that with advertising and promotions, that's helpful."

IBM, also involved with the PGA of America, the NBA, Major League Baseball, tennis, and sailing, has created a state-of-the-art system that not only gives statistical information, but also player interviews and course graphics. At every official TOUR stop, computers are located in the press room and most hospitality tents.

"Fan feedback has been beyond our expectations," Reilly said. "We're going to be doubling the number of systems we provide."

Merrill Lynch has maintained a long-standing relationship with golf, and the company isn't about to back off now.

"We haven't wavered," said Todd Lincoln, vice-president and manager of special services. "Golf meets our criteria from a demographics standpoint. If they don't play golf, they watch it. It's been a home run for us."

For the sixth consecutive year, Merrill Lynch sponsors Tuesday shootouts on the PGA TOUR (21) and Senior TOUR (15). Prize money has increased to \$350,000 on the Regular TOUR and \$250,000 on the Senior circuit.

"We're going full-steam ahead," Lincoln said. "What's really interesting — even in the recession, so many corporations are interested in our event."



Merrill Lynch will venture to the men's Hogan TOUR this year with eight shoot-outs.

"We're going to test some markets," said Lincoln, whose new sites include New Haven, Conn., Tulsa, Panama City, Pensacola and Macon, Ga.

Last year, the Miller Brewing Company, specifically Sharp's non-alcoholic beverage, became involved with the TOUR. Sharp's sponsors three players: Scott Gump, Lee Janzen, and Duffy Waldorf. It also underwrites the Sharp's Shooter Program, a weekly contest that awards players and charity for a hole-in-one.

Sharp's is the official sponsor of the Greater Milwaukee Open and presenter for the season-ending TOUR Championship.

"We think Sharp's and the PGA TOUR is a great match for us," said Miller Brewing Company spokesman Ron Richards. The PGA TOUR is a high visibility sport and an excellent way for us to build an awareness for Sharp's and its great taste."

In 1991, Hilton became the official hotel of the TOUR and Senior PGA TOUR. It also offered a \$5,000 credit to any player breaking a course or tournament record, and \$1 million to any player who broke 60, with half going to charity. Chip Beck did just that last October, shooting a 13-under-par 59 at the Las Vegas Invitational.

"That's given us great exposure," said Bob Dirks, vice-president of marketing programs.

The company also developed a "Bounce Back Award" presented to the regular and Senior TOUR's comeback player of the year. Last year, D.A. Weibring and Bruce Fleisher shared it

SAM GREENWOOD/PGA TOUR



PGA TOUR events such as the TOUR Championship provide Sharp's with high visibility and increased product awareness. John Cook, pictured above, at the TOUR Championship in Pinehurst.

on the PGA TOUR and Larry Laoretti won it on the Senior PGA TOUR.

"The reason we got involved was the demographics of golf matched the demographics of our guests," Dirks said. "Golf brings that out and helps

us with our expansion.

To have that in your portfolio is an excellent advantage."

Hilton currently owns or operates 44 resorts.

"Golf is very influential in taking over resorts," said Dirks. "It's the fastest-growing sport in America. It's worked out well."

Likewise for Buick. The longest-running corporate sponsor on the PGA TOUR, the company has underwritten the Buick Open in Grand Blanc, Mich., since 1958.

In 1990, Buick added the Buick Classic at Westchester Country Club

in Rye, N.Y., and the Buick Southern Open at Callaway Gardens in Pine Mountain, Ga. This year, the company assumed sponsorship of the San Diego Open at Torrey Pines Golf Course, now called the Buick Invitational of California.

"The reason is to increase awareness in California," said merchandising specialist Jim Pitcher. "California has the largest car market in the country. It spreads us out."

Not only is Buick the official car of the PGA TOUR, the company is also co-sponsor of "Inside the PGA TOUR," a weekly television highlight show, and owns another syndicated golf program.

"Golf is an integral part of Buick's marketing strategy," Pitcher said. "We use it for merchandising, advertising, displays, and the introduction of new cars. It's a full circle."

For instance, scorecards at Torrey Pines, one of the busiest public courses in the country, include the Buick

"Fan feedback has been beyond our expectations,"
Reilly said. "We're going to be doubling the number of systems we provide."



HIT THE ROAD

Crack

ONE WAY

EPA REGULATIONS

INSURANCE

ADMINISTRATION

LICENSING

PERMITTING

FUEL
Availability

FUEL
Costs

OPERATING
COSTS

CAPITAL
CONSTRAINTS

MAINTENANCE
COSTS

EQUIP-
MENT
INVESTMENT

DISSATISFIED
CUSTOMERS

DOWN
TIME

MISSING
DELIVERIES

STOP

STOP



If you imagine truck ownership as a pinball game in which every problem is a bumper, guess what? You're the ball.

So instead of getting bounced around between things like unstable fuel supplies, vehicle administration and maintenance, tougher EPA regulations and new truck technology, tilt the game in your favor with a Ryder Full Service Lease.

Ryder tilts the transportation game in your favor.

You'll get more than custom specified vehicles, a preventive maintenance program that keeps them running in top condition, and substitute trucks when you need them. You'll get the competitive edge, because you'll have better control over getting your products into your customers' hands on time.

Call Ryder for a free "Lease Versus Own Analysis" at 1-800-952-9515, ext. 102. After all, your company's transportation is a game you can't afford to lose.

RYDER[®]
1-800-952-9515



insignia. Just another way to enhance name recognition.

"We don't look at it from a one-shot standpoint," said Pitcher. "It's a continuous marketing program."

Buick didn't take the golf plunge on instinct. Hours of thought and research went into the commitment.

"We have a golf strategy team

made up of consultants and sports marketing agents," said Pitcher. "We took a look at all the options and that was the best opportunity for us."

A year-around opportunity. Which is another reason the PGA TOUR was so attractive.

"Now we have tournaments that run from February to October,"

THE BEN HOGAN TOUR

When the Ben Hogan TOUR began three years ago, the idea was to give promising professionals a place to hone their games. That has happened, but so has something else.

Viewed by some as a proving ground to its big brother, the PGA TOUR, the Hogan TOUR has assumed its own identity. Not only has it produced some of the game's rising stars — John Daly, Jeff Maggert, Tom Lehman, Ed Humenik, and Scott Gump, but it's proving a viable alternative for spectators and corporate sponsors alike.

With 30 events and minimum \$125,000 purses, the Hogan TOUR has attracted marquee players. Why not? The top five money winners earn PGA TOUR cards the following year.

It also has enabled pro golf to reach untapped areas and raise thousands of dollars for local charities. "People are real excited about it," said Gary Stevenson, executive vice president of marketing for the PGA TOUR. "We have the ability to take it to new markets. There's an opportunity for immediate impact."

Last year's Ben Hogan Cleveland Open raised more than \$400,000 for local charities in only its second year. Much of the credit belongs to presenting sponsor Revco Drug Stores Incorporated, a nationally-syndicated chain of 1,045 stores located throughout 10 states.

"That name alone gave the event a lot of credibility," said tournament coordinator Hope Grant. "The first year, people perceived it as a country club outing. They're real pleased. Revco is community-oriented."

Which is exactly what the company wanted to prove.

"We look at this as a way to bring a PGA TOUR event to the people of Northeast Ohio, and to raise as much as we can for charity," said Bob Newmark, Revco's vice-president of marketing. "They don't have anything available to them."

They do now. Stevenson said the PGA TOUR is looking to expand sponsorship of the Hogan TOUR.

"It's a chance for one or two companies to have a major impact on golf," Stevenson said. "It's like a modern-day barnraising. Competition is great. We have up to 25,000 spectators on Sunday."

Not to mention golf's rising stars.

RICH SHARP INC.



To attract new customers, MCI offers spectators attending the MCI Heritage Classic one free call to anywhere in the world.

Pitcher said. "It keeps the Buick name out there."

MCI has been associated with golf since 1987, when it became title sponsor of the Heritage Classic at Harbour Town Golf Links in Hilton Head, S.C. The contract has been extended through 1994.

"We are as convinced today as we were when we first got into it that golf is a viable method to get to our customers and entertain our clients," said Donald L. Campbell, director of special promotions for the Washington, D.C.-based company.

MCI has taken full advantage of its association. The company hand-picks 100 employees from around the country to work during the Heritage Classic. Yes, they work hard. They also get paid and spend a week in South Carolina.

MCI also sets up a phone station at the Heritage Classic and spectators receive one free call to anywhere in the world. The idea is to attract new customers, and according to Campbell, the promotion has lured more than 200 a day.

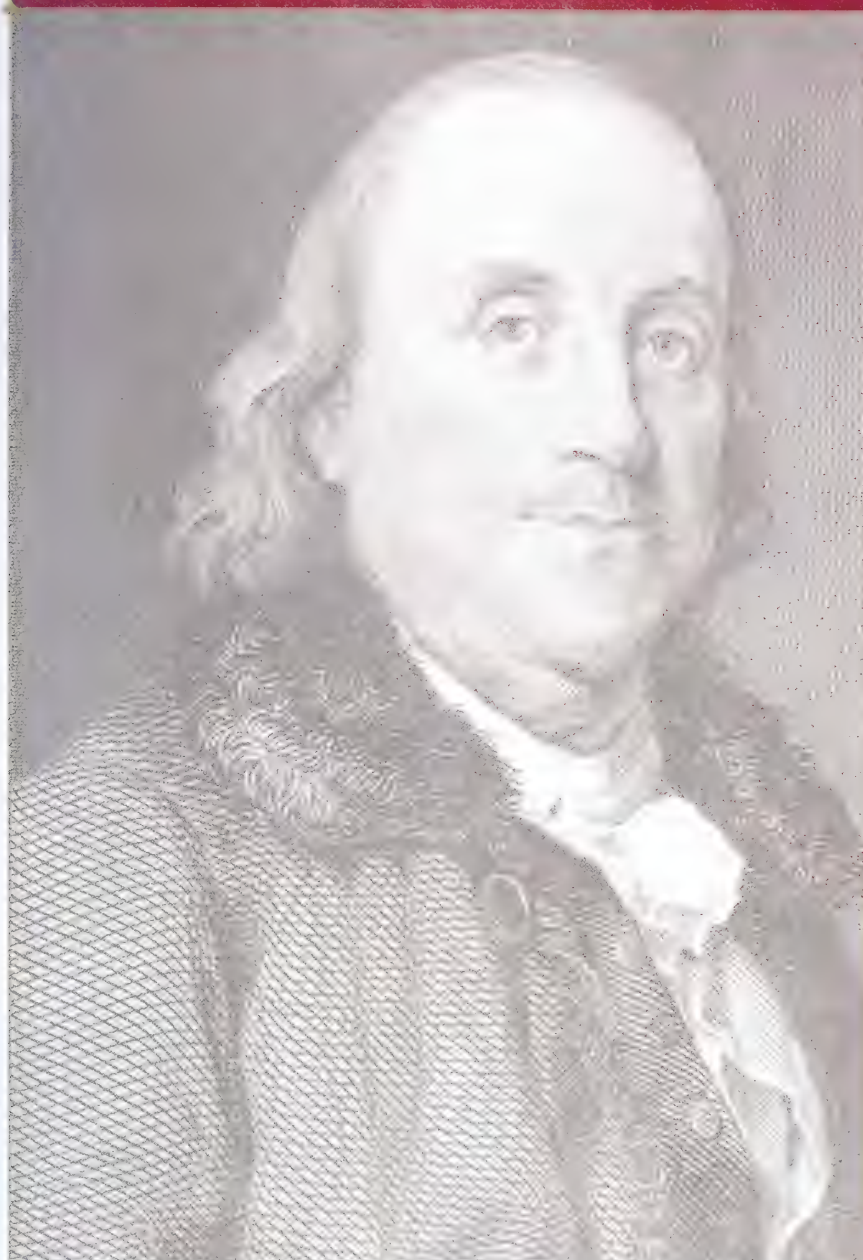
The concept has been so successful for MCI, it will use it at selected PGA TOUR and Senior PGA TOUR sites in 1992.



JEFF M. BRIDGE PGA TOUR

FRANKLIN

U.S. GOVERNMENT SECURITIES FUND



FRANKLIN
BELIEVED
IN A GOVERNMENT OF
THE HIGHEST QUALITY.

Today, the Franklin U.S. Government Securities Fund stands out as a quality investment if you seek high current income and high credit safety.

This professionally managed fund of predominantly Ginnie Mae securities offers you:

- ◆ Monthly dividends.
- ◆ U.S. government securities that are among the highest yielding on the market.
- ◆ Securities that carry the full faith and credit of the U.S. government as to the timely payment of principal and interest.[†]

Fact is, this is one of the largest government securities mutual funds in the world.

Call Franklin today.

1-800-342-FUND
EXT 1337

Yes! I would like a free prospectus containing more complete information on the Franklin U.S. Government Securities Fund, including charges and expenses. I will read it carefully before I invest or send money.

____ I am currently a Franklin shareholder.



Name _____

Address _____

City/State/Zip _____

Daytime Phone _____

FRANKLIN DISTRIBUTORS, INC.

Member \$57 Billion Franklin Group of Funds®

777 Mariners Island Blvd., San Mateo, CA 94404-1585

BWK92
L37

[†]Individual securities owned by the fund, but not shares of the fund, are guaranteed by the U.S. government. Yield and share price will vary with market conditions.



At dawn, the Blue Monster looks docile enough. The first tentative rays of the sun filter down through the clouds, bathing the Doral Resort and Country Club grounds in an amber glow. It will be 12 hours before the final pairing of the day is ready to challenge the Blue Monster's demanding 18th hole.

TOURNAMENT FOR A DAY



By Helen Ross

For now at least, the golf course that hosts the Doral Ryder Open is simply a beautifully landscaped, immaculately groomed expanse of lush green grass, calm azure water, and gnarled ficus trees. In stark contrast to those serene surroundings, however, Doral has been bustling with activity for several hours.

Under cover of darkness, pound after pound of hamburger meat and

hot dogs were unloaded from refrigerated trucks and stashed inside concession tents. As the first signs of light arrive, tournament officials are going from hole to hole, adjusting the tee markers and setting the position of the pins on those firm greens.

By the time the pros start to position themselves on the practice range and putting green, Doral begins to take on the character of a golf tournament. At least, the look familiar to the majority of us.

But the behind-the-scenes effort necessary to produce a tournament like the Doral Ryder Open is nothing short of Herculean. Similar productions are staged week-in-and-week-out, 43 times a year on the PGA TOUR.

Nothing is left to chance from scoring to transportation to parking to first aid to hospitality to inventory — even down to washing the caddy jackets each night. The initial work at Doral is done by an army of some 1,200 volunteers, free labor that insures a hefty contribution to the tournament's charity, the American Cancer Society, each year.

A flow chart of the operation looks like a diagram of the structure of a *Business Week* 1000 company. One like Ryder Systems, Inc., perhaps, which joined the Doral Hotel and Resorts six years ago to sustain the event, a

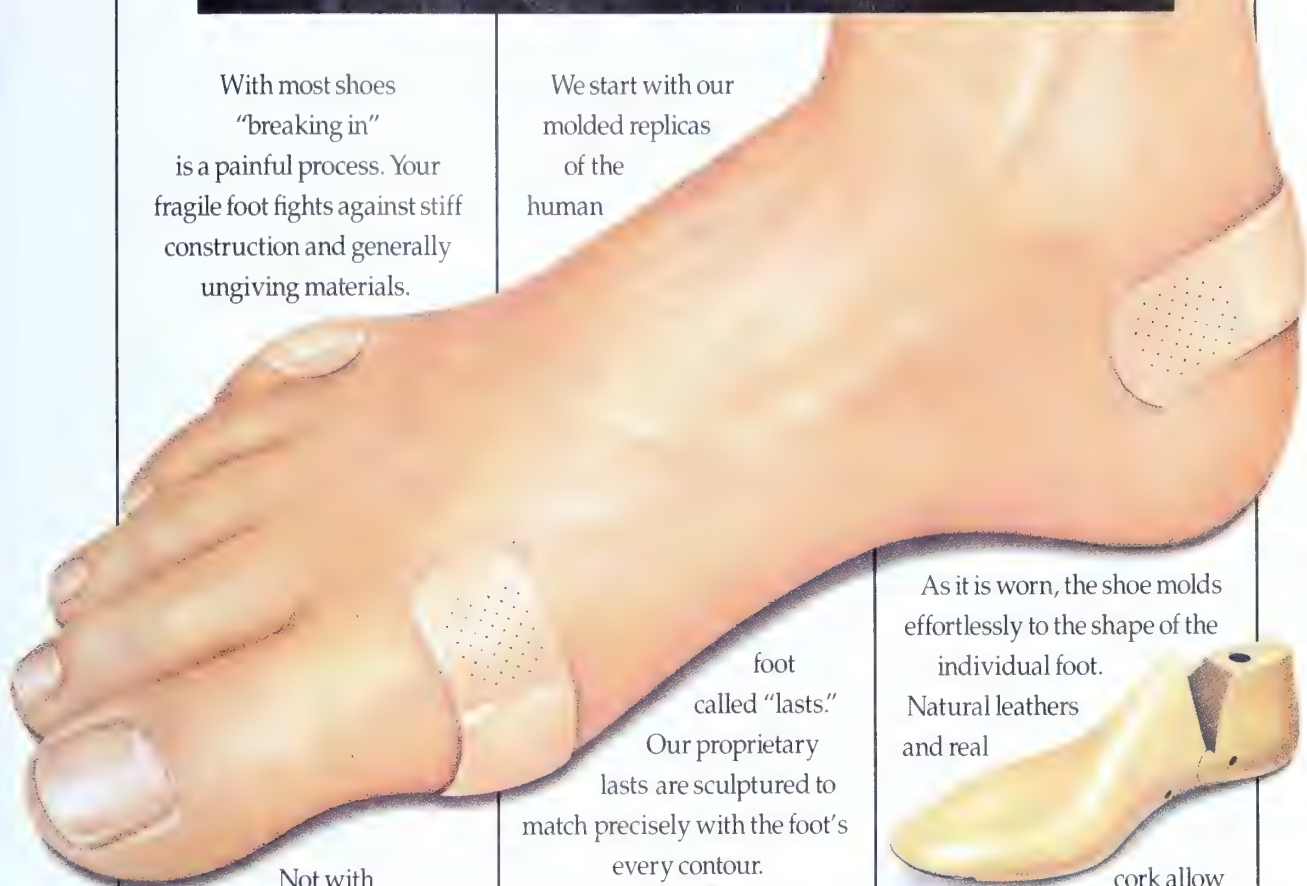


The Doral Ryder Open contributes about half of a million dollars to the American Cancer Society.

During The "Breaking In" Process Of Most Shoes, Exactly What Gets Broken In?

With most shoes
"breaking in"
is a painful process. Your
fragile foot fights against stiff
construction and generally
ungiving materials.

We start with our
molded replicas
of the
human



foot
called "lasts."

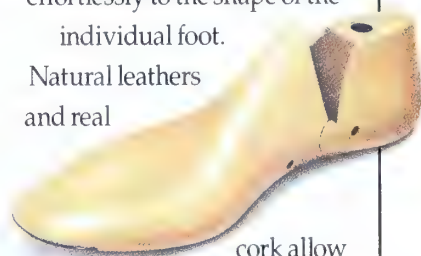
Our proprietary
lasts are sculptured to
match precisely with the foot's
every contour.

Each Allen-Edmonds
shoe style is assigned a
specific last, then crafted
entirely around it: The shoe's
leather upper and lining
are pulled over the last tightly,
eliminating wrinkles
or bumps. The sole is attached
firmly to the bottom,
then worked until it reflects
each contour of the last.
This process gives the
shoe a footprint.



As it is worn, the shoe molds
effortlessly to the shape of the
individual foot.

Natural leathers
and real



cork allow
the foot to settle. In short, it is
the original comfort shoe.

So, instead of using the foot
as a blunt instrument to
pound a shoe into submission,
Allen-Edmonds shoes are
designed to conform to your
foot. Without a fight.

American made
Allen-Edmonds shoes
are available
at fine
stores
worldwide.



Not with
Allen-Edmonds. Our shoes
are constructed and
our natural

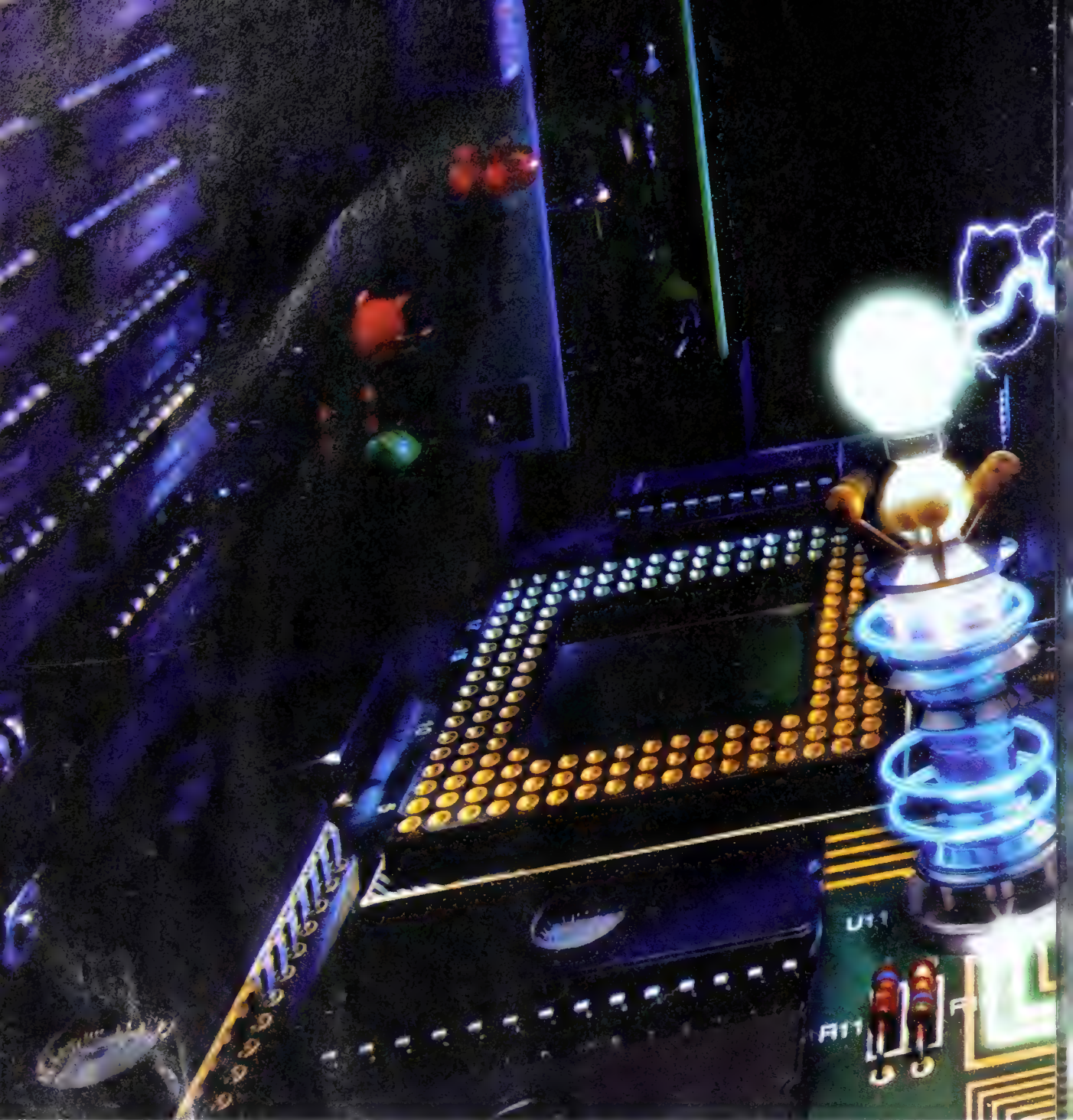


materials selected, to
help your foot fit comfortably
the very first time you
wear the shoe.

Allen Edmonds

Nordstrom • Dillard's • Dayton-Hudson

For a catalog of our shoes and where you can purchase them, send \$3.00. Allen-Edmonds Shoe Corp., Box 998, Dept. 261, Port Washington, WI 53074 U.S.A.



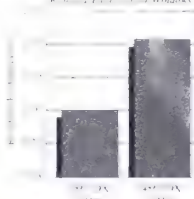
The affordable power source



Today's user-friendly software demands a lot of power to really be friendly. And now you can give it the Intel486™ power it needs for a friendly price.

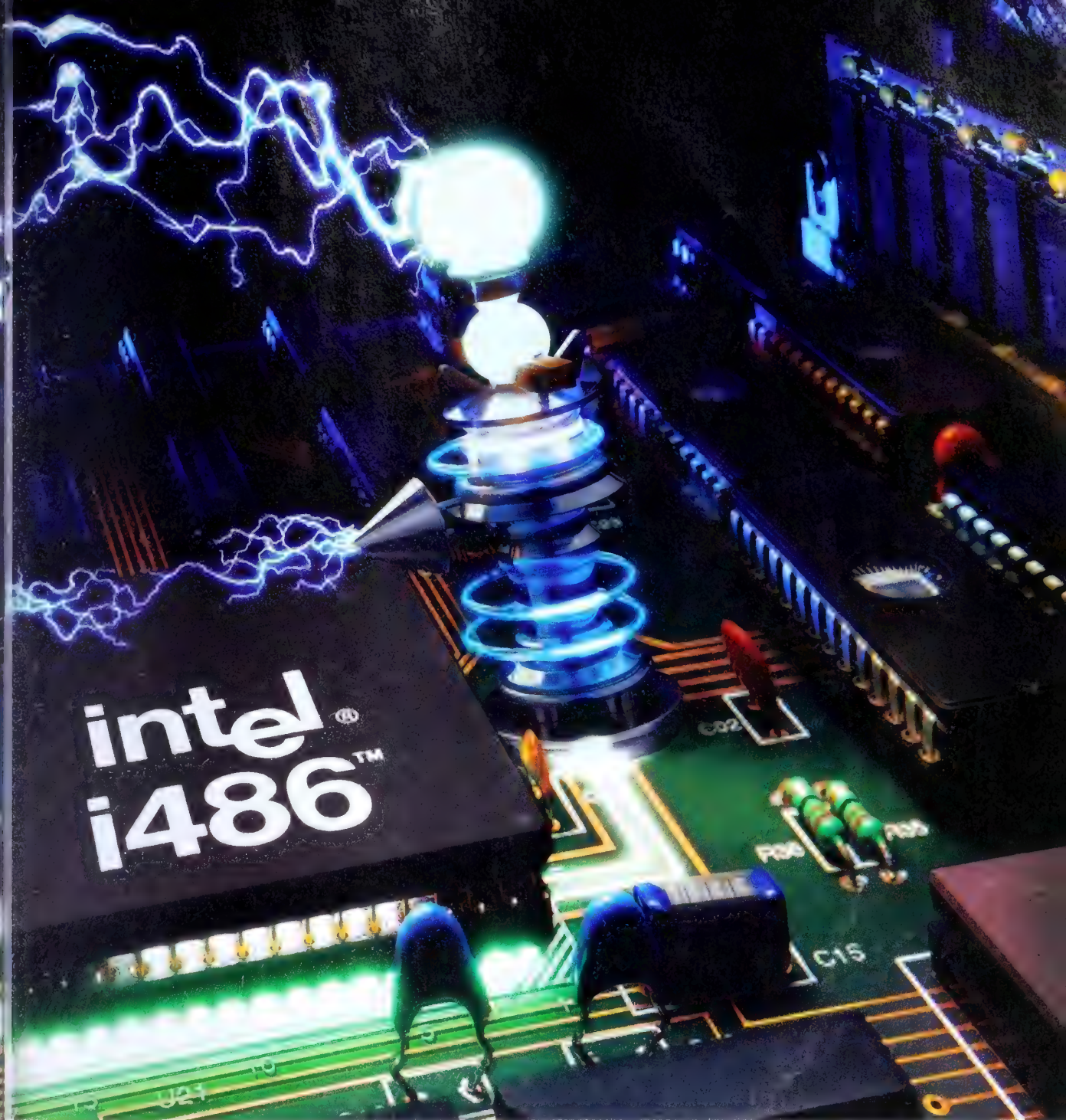
With an Intel486 microprocessor inside, you can take full advantage of today's graphical software. In fact,

*Intel486™ CPU Performance
Relative to Windows*



where other systems get bogged down, like running multiple Windows® applications simultaneously, the Intel486 CPU powers through these kinds of challenging operations easily.

Plus, the Intel486 CPU will keep



Power for today's software.

generating the power you need beyond today. Because the next generation of operating system software—like Windows NT*, OS/2*, Solaris* and NextStep/486*—also needs the power of the i486 CPU.

Ready to get the most out of your windowing software? Then call (800) 228-4549 for a free brochure on the

new standard in desktop computing—the Intel486 family. And plug your software into a real power source.

intel®

The Computer Inside.™

fixture on the PGA TOUR since 1962.

Without the volunteers, the Doral Ryder Open simply would not happen. Some take vacation time to work the tournament while others, like General Chairman Larry Terry, are granted leave from their respective jobs due to the specter of community service.

Some of the volunteers go to great lengths — literally — to work at the Doral. For several years, Kathy and Paul Tufts, who chair two different divisions of volunteers, commuted 90 minutes each way every day.

Fifteen-year veterans, they splurged and got a room at the resort this year.

One of Kathy Tuft's volunteers flies in all the way from Utah each year to work in the nursery Doral provides to care for the pros' children. Another volunteer drives in from the Florida Keys. All in all, a long way to travel for very little glory.

"Why do I do it?" Kathy Tufts repeated the question. "I ask myself

that frequently. There are an awful lot of long hours. It's much easier to buy a ticket and watch the tournament. We never get to see much golf."

Had Kathy Tufts been able to sneak out on the back nine Sunday, though, she would have seen a spectacular story unfolding.

**Without the
volunteers, the
Doral Ryder Open
simply would
not happen.**



Raymond Floyd, just six months shy of his 50th birthday, held back the challenge of the world's #1 golfer, Fred Couples, to win Doral. The victory was all the more amazing considering the stress Floyd was under —

two weeks earlier his \$1.7 million home was destroyed by a raging fire.

Years of memories were reduced to charred rubble. Yet somehow Floyd was able to focus on golf and provided a memorable tournament for himself and his fans.

The on-site preparations begin the week before the tournament. Bleachers are assembled, scoreboards erected and concession stands nailed together.



Volunteers are called and asked to re-enlist and the majority do. A three-day commitment is generally sought, but many opt to work the entire week.

In the bowels of Doral's main building, rooms more accustomed to hosting seminars are transformed into supply rooms for pro-am gifts, caddy jackets and volunteer uniforms once distributed in someone's garage.

The bottom floor of a nearby lodge becomes command central, complete with an aptly named "War Room." Beds are replaced by desks and chairs; walkie talkies are the weapons of choice. The main lobby of the lodge is turned into an information station where volunteers dispense everything from directions to the course to ticket prices and tee times. By the Saturday before the tournament actually begins, activity is at a fever pitch — with good reason, too. A free "Concert on the Green" by the New World Symphony beginning at 6 p.m. would attract about 10,000 people.

The symphony was positioned on a stage floating in the lake beside the 18th green, to be replaced by a scoreboard on Monday.

The bleachers nearby were filled, practically to overflowing. People spread out quilts and tablecloths to stake their claim to fairway real estate, some brought picnic baskets filled with fried chicken and baked beans — one group even had a pitcher of martinis along with a 32-ounce bottle of olives. Those who didn't plan ahead could buy anything from white wine to cappuccino, grilled chicken and croissants to sausage dogs.

That upscale tailgate party lasted well past sundown, ending with the



Three pro-am tournaments are held during the week leading up to the Doral Ryder Open.



There are special links connecting Centel and charity.

The young woman standing behind Centel golfer Bob Gilder is Bernadette Kirivan. Bernadette's an Evans Scholar, the latest in a sixty-year tradition that has seen thousands of bright and deserving caddies attend college on Evans Scholarships.

At the Centel Western Open, all

net proceeds go toward funding these scholarships. Meanwhile, other Centel-sponsored tournaments help support such charities as the United Way and the Children's Miracle Network.

We think it is a terrific fit all around, because helping others creates the most important link of all.

CENTEL
WHERE PEOPLE CONNECT

IF YOU'RE EXPECTING EVEN MORE FROM A HOTEL IN TIMES LIKE THESE, YOU'D BETTER WAKE UP.



Over the last few years, we've invested more than a billion dollars in our hotels to meet your changing needs. So, while other hotels may be forced to cut back and give you less, at Hilton we're giving more, doing more, and moving ahead.

DOUBLE-DIPPING ENCOURAGED HERE.

As a member of the HHonors Guest Reward Program, you won't have to choose between earning hotel points, or mileage credit on your favorite airlines. Unlike other hotel programs, Hilton HHonors lets you have both. As well as fabulous new rewards.

HERE'S A HOTEL WITHIN A HOTEL.

At select Hiltons across America, you can enjoy the very best we have to offer the business traveler—our magnificent Towers accommodations. With separate registration, private lounges, and a concierge and staff devoted to your every need.

HERE.

RENOVATIONS HERE, THERE AND EVERYWHERE.

Unlike some of our competitors, we're continuing to refurbish our hotels, like The Waldorf=Astoria and the Chicago Hilton and Towers, from lobby to penthouse. We've also added exciting new properties, like The Pointe Hilton Resorts in Phoenix.

THERE'S SOMETHING HAPPENING HERE.

We've created a new Hilton image, as evidenced by our brand-new signature, to underscore our commitment to continuous improvement. So, next time you're hoping for more from a hotel when you're on the road, wake up here. At Hilton.



WE MAKE IT OUR BUSINESS TO BE WHEREVER YOU GO.

ARIZONA

Phoenix Area
Mesquite-Hilton Pavilion
Phoenix Airport Hilton
Phoenix Hilton Suites

CALIFORNIA

Anaheim Hilton Suites
Fresno Hilton
Los Angeles Area
Beverly Hills-The Beverly
Hilton
Long Beach Hilton
Los Angeles Airport Hilton
and Towers
Pasadena Hilton
Universal City Hilton
and Towers
Ontario Airport Hilton
San Diego Area
Del Mar Hilton
San Diego Mission Valley
Hilton
San Francisco Airport Hilton
Valencia Hilton Garden Inn

DELAWARE

Wilmington Area
Claymont-Wilmington Hilton

DISTRICT OF COLUMBIA

Washington, D.C. Area
McLean, VA-McLean
Hilton at Tysons Corner
Washington The Capital
Hilton
Washington Hilton and
Towers

FLORIDA

FL Lauderdale Area
Sunrise Hilton Inn
Miami Airport Hilton and
Towers
St. Petersburg Hilton and
Towers
Tampa Airport Hilton at
MetroCenter

GEORGIA

Atlanta Area
Atlanta Airport Hilton and
Towers
Atlanta Hilton and Towers
Norcross-Hilton at Peachtree
Corners

ILLINOIS

Chicago Area
Buffalo Grove Hilton
Garden Inn
Chicago Hilton and Towers
Chicago-The Palmer House
Hilton
Lisle/Naperville-Hilton Inn
Hilton Inn of Oak Lawn
Oakbrook Terrace Hilton
Suites

LOUISIANA

New Orleans Area
Kenner-New Orleans
Airport Hilton

MARYLAND

Baltimore-Pikesville Hilton Inn
Columbia Hilton

MASSACHUSETTS

Boston Area
Boston Back Bay Hilton
Dedham-Hilton at
Dedham Place
East Boston-Logan
Airport Hilton Inn

MICHIGAN

Detroit Area
Auburn Hills Hilton Suites
Novi Hilton
Southfield Hilton Garden Inn

MINNESOTA

Minneapolis Area
Bloomington-Minneapolis
St. Paul Airport Hilton
Minneapolis-Metropolitan Hotel

NEW JERSEY

Newark Hilton Gateway
Parsippany Hilton
New York Area
Short Hills-Hilton at Short Hills
Somerset Hilton

NEW YORK

Buffalo Hilton
New York Area
Jamaica-JFK Airport Hilton
Long Island/Melville-
Huntington Hilton
New York Hilton and Towers
The Waldorf-Astoria
New York Area/
Westchester County
Rye Brook-Rye Town Hilton
Tarrytown Hilton Inn
Syracuse-Hilton at
Syracuse Square

OHIO

Akron Hilton Inn at Quaker
Square
Akron West Hilton Inn
Canton Hilton
Cincinnati Area
Florence, KY-Commonwealth
Hilton
Dayton-Daytonian Hilton

OREGON

Portland Hilton

PENNSYLVANIA

Harrisburg Hilton and Towers
Philadelphia Hilton and
Towers
Philadelphia
Valley Forge Area
King of Prussia-Valley
Forge Hilton

Pittsburgh Hilton and
Towers

SOUTH CAROLINA

Greenville Hilton

TENNESSEE

Nashville Area
Brentwood Hilton Suites

TEXAS

Dallas Area
Grapevine-DFW Hilton
Executive Conference Center
El Paso Airport Hilton
Houston-Westchase Hilton
and Towers
San Antonio-Metro Palacio
del Rio
Waco Hilton

UTAH

Salt Lake Airport Hilton

VIRGINIA

Lynchburg Hilton

WASHINGTON

Seattle Airport Hilton
Seattle Hilton

CONRAD HOTELS

ENGLAND
London-Conrad London

HONG KONG

Hong Kong-Conrad Hong Kong

IRELAND

Dublin-Conrad Dublin

TURKEY

Istanbul-Conrad Istanbul

staccato blasts of fireworks that illuminated the sky in brilliant hues. Amazingly, any trash left behind by those thousands of listeners was gone by the start of Sunday's pro-am, the first of three held in conjunction with Doral.

Although they would outnumber spectators about 2 to 1 that Sunday, the gallery marshalls are positioned in their red-white-and-blue best to watch for errant shots and quiet the rare fan. By Tuesday's Skins Game — which featured Jack Nicklaus, Ian Baker-Finch, Raymond Floyd and John Daly — their job was much more difficult with an estimated 20,000 in attendance, a test run for the rest of the week.

By Sunday night and Monday, there is a flurry of activity behind the scenes as the golf pros and their families make the cross-country trek from the PGA TOUR's last stop, the Nissan Los Angeles Open. Volunteers meet the red-eyes or the midnight arrivals, loading luggage and entourage into courtesy cars for the 20-minute trip from the airport.

Later in the week, those cars and drivers will be available for trips to the mall, sightseeing, or visits to the laundromat. The tournament also provides a hospitality room for the pros, stocked with food and drink and outfitted with television sets for the pros' wives to watch the action when the crowds get too big. The nursery offers toys, arts and crafts, and movies for their kids — one chip-off-the-old-block awoke from his afternoon nap there saying frantically, "my clubs! my clubs!"

Coeds from the University of Miami are enlisted for the contestant shuttles, golf carts that take the pros and their caddies to and from the practice tee. Often there are detours to the well-stocked lakes that make Doral

one of the pros' favorite fishing spots.

Joanne Yawn and Cuddy Moore were recruited to work the tournament through their country club three decades ago. Moore has been a volunteer at all 31 Dorals while Yawn has worked 30. Together, they oversee the scoring division — a network linking the markers that walk with each group to the various on-course scoreboards, as well as those in the media center and corporate hospitality tents.

That first year, Moore remembers the markers, then called scorers, dressed in white and wore sashes like beauty queens. A gregarious sort and tireless worker, she has since been recognized at Senior PGA TOUR events by pros who frequented Doral in its infancy.

Now Moore and Yawn — they call themselves Frick and Frack — spend most of their time in the supply areas of the main building, making sure the markers get their clipboards and know how to keep the statistics on putting and drives that the PGA TOUR requires. They usually see golf only on television, although relatives swear they see them on the course.

"My nieces and nephews always said they saw me wave to them on



Joanne Yawn and Cuddy Moore have been volunteers at the tournament for over three decades.

JEFF McBRIDE/PGA TOUR

For reservations, call your travel agent
or 1-800-HILTONS.



Questions to ask yourself about business insurance:



According to the Health Insurance Association of America, the average price tag for a year in a nursing home is now up to \$25,000.

It's a burden that could wipe out your retirement income, plus your personal and business assets.

Independent agents who represent the CNA Insurance Companies understand the role of long-term care protection in estate planning.

These agents recommend CNA

with confidence. They know we've been committed to long-term care protection since 1965 and offer the widest range of policies for individuals and employee groups of 500 or more.

CNA, a multi-line insurance group, has nearly 100 years' experience, over \$9 billion in revenue, over \$30 billion in assets, \$4.5 billion in stockholders' equity and consistently high ratings.*

*A.M. Best, Standard & Poor's, Moody's, Duff & Phelps

Ask your independent agent or broker about CNA.

CNA provides property/casualty life/health and employee benefits insurance. CNA Long-Term Care products are underwritten by Continental Casualty Company one of the CNA Insurance Companies/CNA Plaza/Chicago, IL 60685.

INSURANCE FROM
CNA

For All the Commitments You Make®



By midday, the corporate hospitality tents that offer buffet lines and tables for guests and customers are pretty full.

TV," Yawn said. "And I always said, 'Sure.' But the only way they could see me is if I was laying on the green!"

Not everything runs smoothly, of course.

Terry remembers a sponsor's banner that was hung upside down. Then there was that time a marker picked up a pro's ball as she walked down the 10th fairway, and Yawn had to "fire" the volunteer.

And they all laugh remembering the woman who fell into the lake besides the 18th green as she attempted to board the skiff that would take her away from the floating scoreboard. An expert swimmer, she swam to shore — and never got her hair wet!

By the time the actual tournament begins on Thursday, though, most of the bugs have been ironed out and a golf competition moves to the forefront. The corporate hospitality compound opens that day, too — a haven for high-rollers and their friends.

That tent city takes over about half the 18th fairway of Doral's Red Course, a temporary green behind it accommodating the resort guests more interested in playing than watching golf. A fake waterfall in front of a fairway bunker lends a touch of class to the compound's main scoreboard. Hanging baskets of mums and marigolds line the paths to each entrance.

Nearby is a semi-truck that has been turned into a makeshift kitchen. Under a huge ficus tree is storage for about 1,000 gallons of soft drinks, 10,000 cans of beer, and some 2,000 bags of potato chips. Refrigerated trucks contain approximately 25,000 pounds of hot dogs, 7,000 breasts of chicken, 3,000 ham and cheese sandwiches, 5,000 hamburgers, and 25 tons of ice. Workers from Lundy's Sports Catering start making deliveries to concession stands in 12 locations about 4 o'clock in the morning.

The hospitality area doesn't get cranking quite that early. But by midday, those small white tents that house bars, buffet lines, and tables for the privileged with the right admission badges are pretty full. The entrance to the Bridgestone tent is flanked by tires while the focal point in GMC's is a shiny new truck. Haagen-Daz carts at either end of the compound offer tempting desserts.

One of the hospitality tents is owned by Ryder, which entertains about 300 corporate customers at the tournament, as well as a host of security analysts, shareholders and financial friends. The display board inside shows one of their familiar yellow rental trucks, but that actually represents less than 10% of Ryder's business — which in a nutshell is a prime

reason the corporation linked itself to Doral and the PGA TOUR.

"Before we got involved specifically in this tournament, we thought about our advertising and public relations programs," said Anthony Burns, Ryder's chairman, president and chief executive officer. "We wanted to have some event, and we looked at everything from bowl games, tennis to golf. Golf represented an excellent alternative. We found through our research that in our consumer profile the most popular hobby was golf."

The main office of Ryder, the world's largest full service leasing company, is located in Miami, which was another factor. Burns liked the opportunity to showcase the area and his company on national television, as well as give something back to the community and the American Cancer Society. Ryder has recently extended its agreement with Doral for another five years.

"This was kind of a home run," Burns said. "We are very satisfied." ●



Ryder CEO Anthony Burns sinks his birdie putt as pro-am partner Johnny Bench looks on.

Bags, Belts And Brakes.



Let's Clear The Air On Safety.

Chevrolet is committed to your driver's safety. And the Chevrolet Corsica you're looking at is a perfect example of how safety-engineered components are

designed *into* the vehicle.

Our commitment to safety begins at the drawing board. In engineering. In design. And at GM's biomedical research lab, where more Ph.D.s and M.D.s are involved in automotive safety than at any other car company in the world.

Our primary concern is to help keep you out of an accident. So every new Corsica comes with standard, 4-wheel anti-lock brakes for controlled steering even in a panic stop. Even on slippery surfaces. And every Corsica comes with all the benefits of front drive and radial tires for all-season traction.

But accidents happen. Which is why protective innovations like the energy-absorbing steering column, 3-point safety belts, steel safety cage construction* and, of course, driver's-side air bag† are standard in Caprice, Corsica, Camaro, Chevy

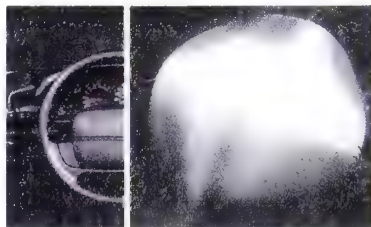
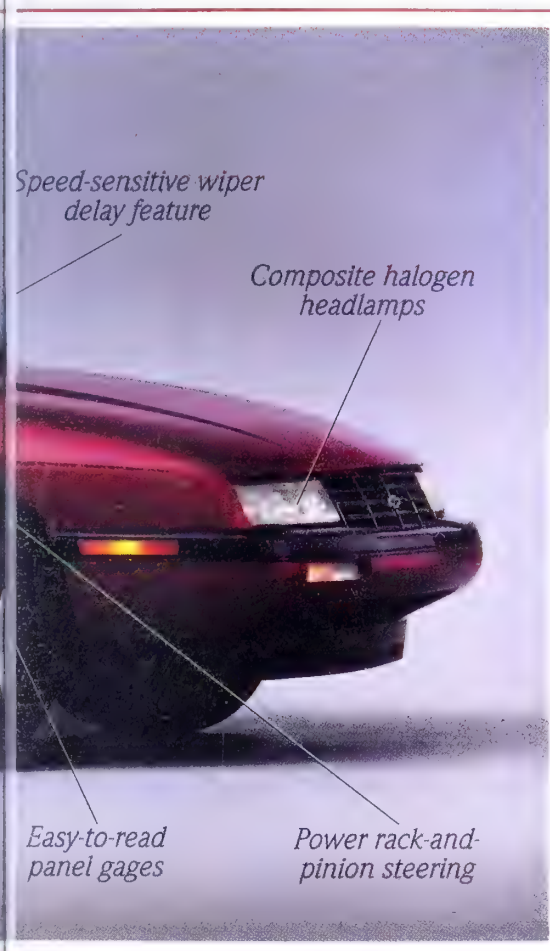
Beretta and Corvette. For more information, call Chevrolet Fleet Sales at 1-800-248-2897.



®Chevrolet, the Chevrolet emblem, Corsica, Caprice, Camaro and Corvette are registered trademarks and Chevy is a trademark of the GM Corp. ©1992 GM Corp. All Rights Reserved. Buckle up, America! *Except on Convertible models. †You must wear your safety belt to receive full benefit of the air bag.



The Heartbeat Of America Is Winning.
TODAY'S FLEET COMPANY IS CHEVROLET.





JEFF MERRIDE, PGA TOUR

Donations have increased fivefold since the Canon Greater Open moved to the TPC at River Highlands in 1984.

been impressive following the introduction of stadium golf courses 11 years ago at the TPC at Sawgrass, site of THE PLAYERS Championship. For instance, there has been a five-fold increase in donations to charity at the Canon Greater Hartford Open since this always successful tournament moved from Wethersfield Country Club to the TPC at River Highlands in 1984. St. Jude's Hospital in Memphis has received in the last six years 150% of what it got from the St. Jude's Classic golf tournament during the 15 years prior to 1986.

Hospitality Hill is the stadium mound back of the 18th green at the TPC at Avenel in Maryland where 15 tents, renting for \$37,500 each, are raised at the Kemper Open. The Phoenix Open at the TPC of Scottsdale has 15 corporate tents going for \$20,000 each to such companies as Valley National Bank, America West, IBM, Apple, and Ping. These tents and their big income were not possible until these tournaments moved to TPC courses.

Then there is that Golden Horseshoe, sort of a bowl stadium surrounding three sides of the 18th green at the Canon Greater Hartford Open. The crowd of about 70,000 sitting on the Golden Horseshoe Sunday afternoon when the winner plays in would fill a couple of Fenway Parks or more than one Shea Stadium. In addition, a dozen corporate hospitality tents are strung out along the ridge above the 18th fairway, and they go for \$20,000 per tent. Last year, following a major renovation of the TPC at River Highlands course, sky boxes seating 20 people each and renting for \$8,000 to \$10,000 apiece

TOURNAMENT PLAYERS CLUBS

MORE THAN JUST GOLF COURSES

By Gordon S. White Jr.

There has been gold in those TPC mounds ever since earth movers first gouged out fairways and used the dirt to pile high stadium hillocks that created a new high rent district for corporate hospitality tents and sky boxes. What better setting to sip, sup, and schmooze as corporations do a relaxing job of sports marketing by gathering customers in these pleasure tents and box seats from where they look

down upon tournament action.

Attendance at Tournament Players Club events on the PGA TOUR has greatly increased at stadium course events because of the improved view of golf action from atop those hills.

The prime beneficiaries from the increased revenue at TPC events have been the charities that depend upon PGA TOUR competitions and the players with larger purses.

Financial growth numbers have



were installed along the ridge looking down on the tricky 17th hole.

Ted May of the Canon Greater Hartford Open said, "The last year at Wethersfield Country Club in 1983 we raised over \$200,000 for charity. The Greater Hartford J.C.'s have raised over \$1 million each year since we moved to the TPC at River Highlands.

This Stadium Course concept, a product of the inventiveness of Commissioner Deane Beman and excellent golf course architects, grew to nine TPC sites on the PGA TOUR in 1992 and more on the Senior PGA TOUR plus Stadium Courses at Las Colinas and The Woodlands. The hospitality tents and sky boxes located on these stadium TPC hills became one of the most attractive

corporate investments in American sports.

Vernon A. Kelly Jr., president of PGA TOUR Investments, Inc., said, "All our events years ago were held on courses that had been built only for the participant and not the spectator. You had to be a pretty avid golf fan to put up with some of the inconvenience of watching a tournament when you stood on a level with or below the players behind rows of spectators blocking your view. This TPC stadium concept was created to provide a better

"The stadium golf course aspects give the spectator such a clear view compared to the former old golf course where everyone, player and spectator, is on the same level."



experience for the spectator by allowing unobstructed views of the players.

"The TPC at Sawgrass served as a laboratory of sorts. From the very beginning sponsors saw the advantages and potential of these clubs and wanted stadium golf courses for their own events. So the TPC network was expanded. Designing a TPC from

scratch we were able in each case to build in large hospitality areas. Hospitality is really a relatively new activity at our tournaments since

194

Inches. The average distance ULTRA® beat Titleist® DT by in ULTRA Challenges in 65 cities across the country. And not a bit over-stated. ULTRA by Wilson®. Measurably Longer™ than anything out there.



Wilson
Made to Win.™

Measurably Longer is a trademark and Ultra and Wilson are registered trademarks which distinguish the fine products of Wilson Sporting Goods Co. Titleist is a trademark of Acushnet Company.

10 years ago there was very little of that and now it is a major income producer for the tournament. Of course, those additional dollars benefit charity."

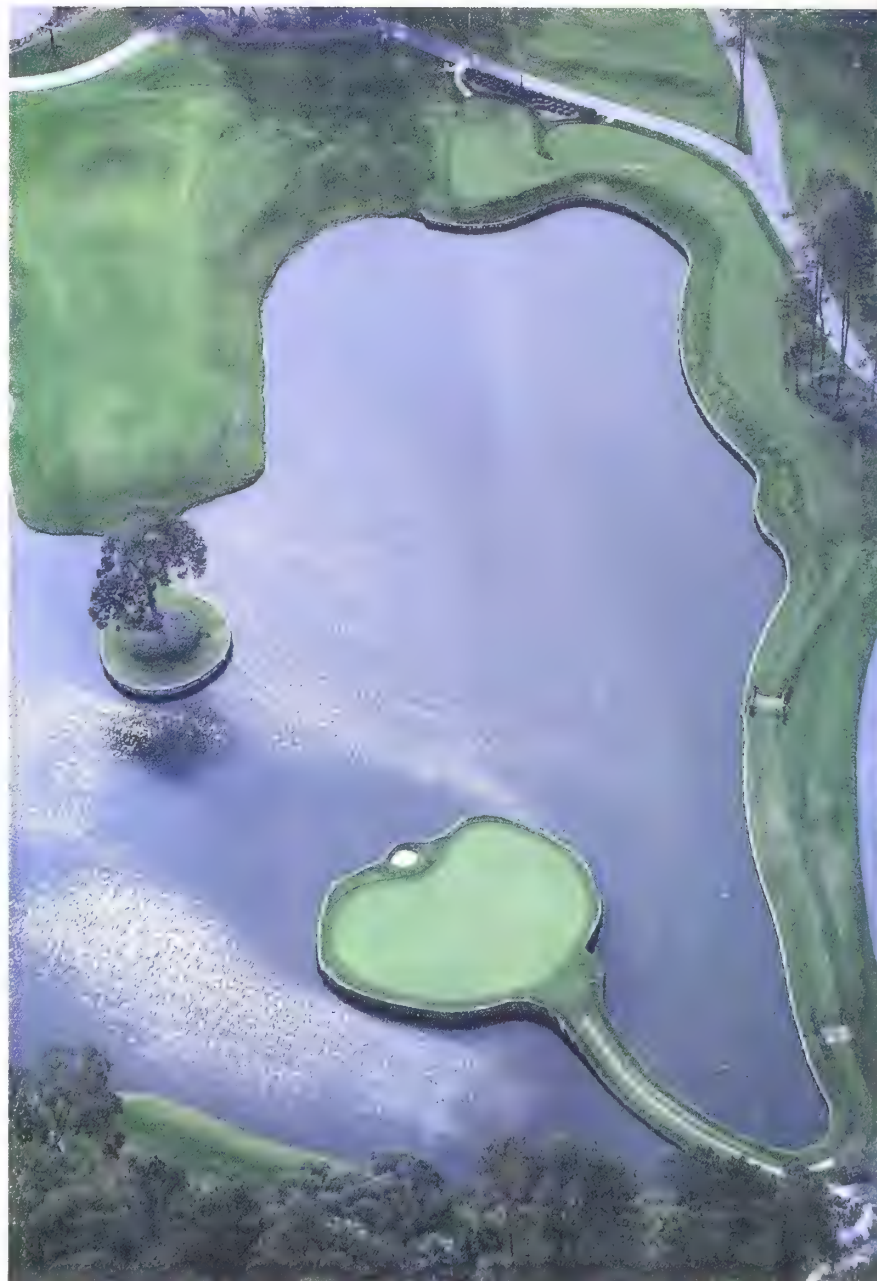
Tournament net income also grows at TPC courses because sponsors no longer have to pay such high rents for the use of privately-owned courses. The PGA TOUR, which owns the TPC courses, has a wide range of favorable fees for tournament sponsors going all the way from rent free to considerably less than the \$350,000 the Congressional C.C. charged for the Kemper Open before that event moved to the TPC at Avenel in 1987.

AT&T is a sponsor on the PGA TOUR and a frequent customer for corporate hospitality tent space at other PGA TOUR events, including many of the TPC sites. Jim Merrigan, AT&T division manager of special events, explained corporate interest in sports marketing this way:

"Sports marketing provides a unique opportunity for companies to build and sustain favorable relationships with business clients. We've concentrated our efforts in the areas of golf, tennis and skiing since surveys indicate that our key business executive customers have a strong interest in these sports. The major portion of our program is concentrated in golf due to the natural ambiance and camaraderie which the game offers."

Total spending on sports marketing in the United States in 1990 was more than five times the amount spent for all tickets to spectator sports events according to a study by the Sports Marketing Group and The Associated Press. It was \$23.52 billion for marketing and \$4.2 billion in ticket receipts.

Obviously, all spending may be down some as a result of the recession. Yet each PGA TOUR event on a TPC Stadium Course reports it



The stadium golf course concept was introduced 11 years ago at the TPC at Sawgrass, site of THE PLAYERS Championship.

did not make less in 1991 than in 1990, and that it fully expects to make as much or more in 1992. Companies forced to stop renting a hospitality tent at one of these tournaments will quickly be replaced by others, according to a survey of all TPC hospitality rentals for 1992.

Ben Brundred, tournament chairman of the Kemper Open at TPC at Avenel in Potomac, Md., said, "The hospitality tent arrangement is probably the biggest difference we have here compared with when we held the Kemper at Congressional. We

have what we call Hospitality Hill wrapped right around the 18th green where we have room for 15 tents. Over at Congressional we took a room in the clubhouse or a tent on the tennis courts, and no one could see golf from either place as corporations tried to play host to customers.

"The rate for a tent is \$37,500 for the entire tournament. That does not include food and catering but does include 400 tickets, a four-color ad in the tournament program, one pro-am spot on Wednesday, and one in the special pro-am Monday."

THE GREAT GREENS.

Harbour Town, the site of the MCI Heritage Classic, boasts a slew of killer holes. This is the toughest by far. A formidable 462 yards. Here, power and placement reign. You strike the ball perfectly only to discover you're still 200 yards short of a defiant, postage-stamp size green. And there, waiting for you, are two dreaded bunkers and a menacing lagoon. Needless to say, this hole has reduced the finest PGA TOUR pros to mere mortals.

8

PAR 4
HDCP 1

MCI HERITAGE 462
MEN'S 422
LADIES' 353



At sunset as you approach Harbour Town's 18th green. Straight ahead is the dramatic storybook clubhouse. Just beyond, the yachts and sailboats are playing on Calibogue Sound. Acres of pines are floating in the air. And anyone not there with you is left en...with envy.



Winning a tournament isn't the only way to cart off lots of green. By using MCI's long distance service, you'll reap the rewards of low rates with a host of savings plans. In fact, by using MCI instead of AT&T, America has saved over one billion dollars in the last two years alone.* With the money you'd save, you might even get what you need most: A golf vacation.

*Estimate of customer savings using MCI vs. comparable AT&T services from 1/90-11/91



It lets you make conference calls, send recorded messages, speed dial and access up-to-the-minute news, weather, sports and stock information.* And the Card is free. Now if that's not enough to drive you to get one, consider this: every player on the PGA TOUR has an MCI Card.® All of which makes the MCI Card the greatest green on the green. To get yours call, 1-800-955-GOLF.

*Certain charges apply to enhanced card features.



When the Phoenix Open moved from the Phoenix Country Club to the TPC of Scottsdale in 1987, attendance shot up from 117,000 for the whole week to just under 120,000 on Saturday alone and nearly 370,000 for the week. The Phoenix C.C. has a nice, private, 18-hole course squeezed into less than 120 acres in the city. There are more than 300 acres at the two-course TPC of Scottsdale where 15 corporate hospitality tents go for \$20,000 apiece, and the huge crowds can be easily accommodated.

In addition, The Thunderbirds of Phoenix who conduct the tournament have put up a tent for display of products such as golf equipment and clothing. Space rents at \$8,000 for a 10 x 10 foot area. The Thunderbirds also have the big money maker called the Birds Nest. It is a huge tent where food and drink are sold to any ticket holder. None of this income was possible at the tight quarters of the Phoenix C.C.

Dwight Drinkard of the Federal Express St. Jude Classic that is now held on the TPC at Southwind in

Memphis saw a distinct long-term advantage in using a TPC course instead of nearby Colonial Country Club where the tournament was held for years.

"The stadium golf course aspects give the spectator such a clear view compared to the former old golf course where everyone, player and spectator, is on the same level."

The Memphis tournament does not rent out a bunch of individual hospitality tents but instead has one big corporate tent where companies buy space. "We found here that where a company can buy a table this concept goes a lot faster for us than high priced individual tents," Drinkard said.

Nevertheless, the Federal Express



Above: Interior of a clubhouse at the TPC of Michigan, host of the Senior PLAYERS Championship.

St. Jude Classic, which contributes to the St. Jude Hospital in Memphis, has made big strides. From 1971 through 1985 this tournament raised \$2 million for the hospital. In the last six years when Federal Express took over title sponsorship and the tournament moved to the TPC site in 1989, the annual event has made \$3 million for the hospital according to Drinkard.

The Tournament Players Club at Sawgrass, the model for all the TPC sites, has 17 hospitality structures and 60 stadium sky boxes, called chalets, along the three finishing holes. Henry Hughes, director of THE PLAYERS Championship, said the tournament had gross revenue of \$3.5 million with "approximately \$1 million of that from corporate hospitality income."

Marriott Hotel, National Car Rental, AT&T, Miller Brewing, Southern Bell, and other companies paid about \$25,000 per tent and something less for the sky boxes at THE PLAYERS Championship. Those hills will apparently be mined for years to come to the credit of the PGA TOUR and benefit of the players and their favorite charities. ●



Huge crowds can easily be accommodated at the two-course TPC of Scottsdale in Phoenix.

FLORSHEIM INTRODUCES THE PERFECT DRESS SHOE.



The Regent, #93345

Introducing the Comfortech Imperial by Florsheim.

The perfect combination of our classic styling, the finest American craftsmanship and the latest in comfort technology.

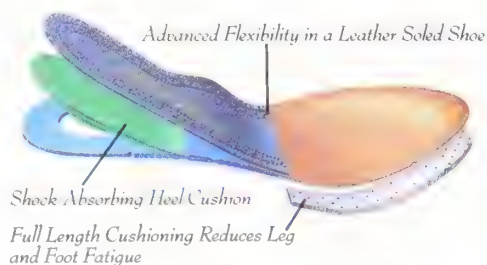
A uniquely designed insole makes the Comfortech Imperial the most flexible, most comfortable leather soled shoe found anywhere in the world.

So uniquely comfortable, in fact, that Florsheim protects this advanced technology with a patent.

But making a Comfortech Imperial is as much an art as it is a science. That's why only our most

experienced, most talented craftsmen are reserved for creating and inspecting this fine shoe.

UNIQUE, PATENTED COMFORT SYSTEM



Choose from Wing-Tip Kiltie Tassel Slip-On, Wing-Tip Laced Oxford and Perfed Tip Laced Oxford at \$130. Available in Black, Mahogany and Brown across a wide range of sizes from 6 to 15 and widths from B to EEE.

Don't wait any longer to experience the comfort and style of the perfect dress shoe. Call 1-800-872-3503 for the Florsheim Dealer nearest you.

FLORSHEIM®

COMFORTECH® Imperial Quality

Quality Is Timeless.

IS IT AN ART?

IS IT A BUSINESS?

IT'S GOLF COURSE DESIGN

By Tim Rosaforte

It was back in the mid-1980s when Pete Dye flew over the Summerlin property eight miles northwest of the Las Vegas Strip, and frankly it didn't look like much. Just a flat piece of desert. A lot of rock. A few desert washes. And not much vegetation other than a few desert scrub bushes.

The chopper touched down and Dye walked the property, never saying a word to the developers, mumbling a few things to the apprentice. He'd kick a few stones with his hands in his pocket and it wasn't until he was just ready to leave that he looked up at the men who planned this to one day be a Tournament Players Club golf course surrounded by the largest planned urban development in the country.

"You know," Dye said. "I bet you this was a heck of a fishing hole 10,000 years ago."

And with that, he got back in the helicopter and headed back to Las Vegas. That's just Pete Dye, for you.

It wasn't until three years later that executives from the Summa Corporation collected themselves and visited the Tournament Players Club at Sawgrass to meet with PGA TOUR Commissioner Deane Beman

and Vernon Kelly, president of PGA TOUR Investments. They were not only interested in the Stadium Course designed by Dye as home for THE PLAYERS Championship, but were also impressed by the neighboring Valley Course since it incorporated the qualities of stadium golf with what constituted a real estate development.

It was work done by that young assistant who accompanied Pete Dye on that helicopter ride. Robert C. "Bobby" Weed Jr., the PGA TOUR's chief designer, had learned his lessons well.

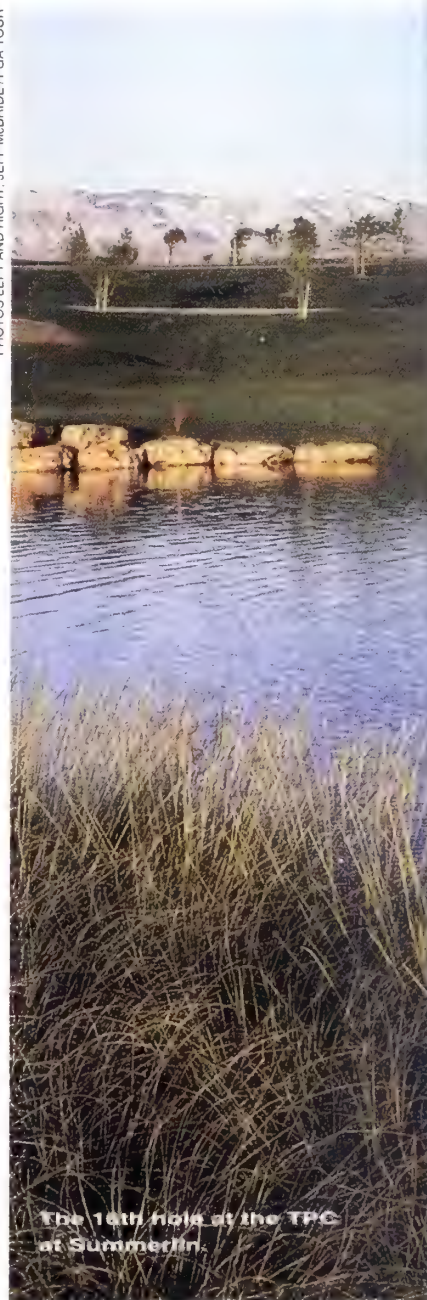
For a consultant, the Summa Corporation wanted Fuzzy Zoeller. For one, Zoeller was the inaugural winner of the Panasonic Las Vegas Pro-Celebrity Classic and was extremely popular in Las Vegas. He would help market the property. His philosophy wasn't to build the toughest golf course in the world, but one the members would enjoy for 50

weeks. The other two weeks of the year, the TPC at Summerlin would host the Las Vegas Invitational and the Las Vegas Senior Classic.

"You're not going to keep the touring pros happy, because everybody's got their ideas about what's good and what's bad," Zoeller said. "But as long as those members at Summerlin are pleased, then I've done my job."



PHOTOS LEFT AND RIGHT: JEFF MCBRIDE/PGA TOUR



The 16th hole at the TPC at Summerlin.



"You've got to understand, I don't pay the bills. I'm a scholarship golfer."

Ground wasn't broken in June, 1990. It was dynamited. The landscape was relatively flat, with a five-degree slope running from the base of the Spring Mountain range down toward the city. The routing had been basically mapped out by Summa, with suggestions made to

take advantage of some of the natural surroundings.

It was the first time Weed and Zoeller had worked as a team. Weed had assisted Dye and Jerry Pate on the Valley Course, but the TPC of Tampa Bay along with the TPC at River Highlands was his first solo work for the PGA TOUR. Zoeller and Hubert Green collaborated on the TPC at

Southwind, which had received rave reviews from the players competing in the Federal Express St. Jude Classic.

"They have a traditional approach," said John Goolsby, president and CEO for Summa Corporation. "They believe if a player hits a good shot, he should be rewarded with good position in the fairway and on the green. We didn't want a lot of extreme



Facts are facts. Cleveland Wedges are number one on the PGA Tour.



DARRELL SURVEY COMPANY		
1991 The Players Championship Tournament Players Club Ponte Vedra, Florida March 28-31, 1991		
ALL WEDGES		
CLEVELAND	70	32%
PING	61	
WILSON	46	
HOGAN	25	
MIZUNO	25	
TAYLOR	13	
T. ARMOUR	11	

DARRELL SURVEY COMPANY		
1991 The International Castle Pines Golf Club Castle Rock, Colorado August 15-18, 1991		
SAND WEDGES		
CLEVELAND	62	31.0%
PING	42	21.0%
WILSON	22	11.0%
HOGAN	18	9.0%
MIZUNO	11	5.5%
TAYLOR	9	4.5%
COBRA	7	3.5%

DARRELL SURVEY COMPANY		
1991 MCI Heritage Classic Harbour Town Golf Links Hilton Head, South Carolina April 18-21, 1991		
ALL WEDGES		
CLEVELAND	62	21.4%
PING	54	18.6%
WILSON	36	12.4%
WILSON	28	9.6%
HOGAN	17	5.8%
MIZUNO	14	4.8%
T. ARMOUR		3.8%
TAYLOR		

In 27 out of 44 tournaments on the PGA Tour in 1991, Cleveland was the most played wedge according to the Darrell Survey.

You don't have to be a tour player to get the most out of a Cleveland wedge. Cleveland's sole and flange designs, along with incredible feel, will make anyone a better wedge player, no matter what their handicap.

Whether it's wedges or irons, any pro will tell you to use the club that best fits your game. And Cleveland is the first company to let you build your game One Club at a Time.

The fact that the Cleveland wedge system won 19 times on the PGA Tour in 1991 makes it a good place to start.

The Darrell Survey information is a statement of fact and is not an endorsement


**Cleveland
Classics**
One Club at a Time



penalties so it would take all day to play a round. We knew that Fuzzy and Robert had that same approach to the game."

There were other reasons why Summa chose the PGA TOUR, one being they had developed a reputation for running a high-end golf course operation. Goolsby interviewed other golf course designers, but he kept coming back to the idea of a TPC setting the standard for his community.

"They just brought more to the table," Goolsby said. "Frankly, we concluded that we would get the best product for what we wanted by using the PGA TOUR."

Summerlin is planned to spread out over 23,000 acres and one day be the home of 200,000. The area surrounding the TPC course is a 1,000-acre village in the middle of the property. It is a very small part of the

picture, sort of the way the smile is on the Mona Lisa.

Howard Hughes bought the property in the 1950s for a song. The original acquisition cost Hughes \$100,000, which was a lot of money back then but the approximate cost of a lot now. Even in these tough economic times, real estate sales have gone well, so well in fact that the first phase was sold out without ever going to the general public. That property went to the founding members of the club and the board of governors. Two hundred memberships at an initiation fee of \$30,000 were sold before the club ever opened in November, 1991.

"We left everything kind of natural, we just blended it in with the surroundings," Zoeller said. "There's nothing artificial about it."



What makes the TPC at Summerlin so unique in the Las Vegas market is that it is one of the few clubs in the city that is not associated in any way with the casinos. This is a private club, far removed from the glitz and glitter of what puts Vegas on the map.

"It's quite an interesting community once you get away from the strip," Goolsby said. "We see a whole different side of it. We're a city of 850,000 that's very family oriented and a pleasant place to live. It just happens that we have a strip that's called the entertainment center of the world. It's a great thing for tourists, and the local economy. But it's something most people who live here don't see."

At Summerlin, the members are seeing a golf course that is unlike the typical desert layout where it's hard to tell one hole from another without a scorecard.

"The design intent was to work with the lay of the land. The only distinguishable features of the property were the washes which we incorporated into the strategy and angles of a number of holes," said Robert Weed. That meant big greens, tees, bunkers and expansive wide fairways.

It was also Weed's first work in the desert, although he assisted to a lesser degree in the construction of the TPC-StarPass in Tucson and the TPC at Scottsdale. Although the land was cheap, Summerlin was an expensive course to build. Some costs were saved by using much of the rock taken from the blasting process to create a theme. The only



Fuzzy Zoeller and Robert Weed teamed up to build the TPC at Summerlin.

raw material brought in was the sand for the bunkers and the greens. All of the topsoil was made with a crushing and screening operation. The boulders were used as retaining walls to support greens and tees and add aesthetics.

With the stadium and real estate concepts in mind, much of the golf course had to be built down to create spectator viewing areas and views for the homeowners. Three large spectator mounds were built, one in the area near holes number 1, 2, 3, and 8, another hub by 11, 12, and 13, and the final viewing area for the closing holes 16, 17, and 18. This was done maintaining the integrity of the desert landscape whenever possible and incorporating it as features of the golf course.

"We left everything kind of natural, we just blended it in with the surroundings," Zoeller said. "There's nothing artificial about it."

Zoeller's favorite hole is the par-3 fifth, which plays 190 yards from the back tees, downhill over a desert wash. "It looks like a hole that had been laid there before we got there," Zoeller said. "It's just so natural, so beautiful. It's unbelievable."

The journey into the 36,000 square-foot clubhouse from the clubhouse is a remarkable one. Playing into the mountain range in the distance, each shot has that postcard for a backdrop. "At the right time of the evening," Zoeller said, "it's absolutely gorgeous."

The 15th is a short par-4 of 310 yards that is best played with a mid-iron layup. That provides a better view to an elevated green. No. 16 is a reachable par-5 with water protecting the green. No. 17 is a medium-length



The TPC at Summerlin is the host of the Las Vegas Invitational and Las Vegas Senior Classic. The 15th hole is pictured above.

par-3 that has the most penalizing bunkers on the golf course. The closing hole is a 450-yard par-4 that plays into the prevailing wind that features a forced carry over a natural desert area and a green that is 60 yards long.

Weed gave the course color by planting mesquite and olive trees, mondanis pines, desert willows, blue palos verdes, deer grass, acacia and baccharis.

The extremes of the desert climate make it difficult to grow grasses. The irrigation system at Summerlin is the most sophisticated Weed has been involved with. All of it is computer driven.

There's an evapo-trans-

piration system to monitor the amount of water that escapes the plant during the day, and tensiometers which determine the amount of moisture in the soil and how much water is required through the sprinklers. The fairways are also lined

with half-circle heads so as to not irrigate the desert and upset the ecological balance.

Zoeller's input was less technical. He first played the course with Goolsby when the fairways were rough-graded. "Fuzzy fine-tuned it," Goolsby said. "He came out when the course was just dirt to see where the tee shots fell. He also wanted me to hit some shots because I'm an average golfer and that's who the course is designed for."

Zoeller accompanied Weed on trips to Summerlin to oversee completion of the project, imputing his knowledge of shotmaking and course strategy. When the TOUR travels to Las Vegas in October, it will find a golf course that should pass their inspection. But you have to understand, it's not the touring professionals that Zoeller cares about pleasing. It's those people who put up \$30,000 and pay their annual dues at Summerlin that he aimed to please — and according to Goolsby, the man who writes the checks, he has. ●

**Zoeller's favorite
hole is the
par-3 fifth, which
plays 190 yards
from the back tees,
downhill over a
desert wash.**



We Carry The People Who Carry The Day.



The Official Airline Of The Senior PGA TOUR.

CATALONIA, SPAIN

GOLF THE YEAR 'ROUND

By Sally Peterson

Every so often, we come upon a vacation place that's so unspoiled we hesitate to share it with anyone. Yet we rush home to tell all our friends.

For golfers, Catalonia, Spain, is one of those places.

In the northeastern corner of Spain, snow-capped mountains give way to miles of sandy beaches. Age-old Roman ruins dot Catalonia's countryside.

There's golf everywhere, the year 'round. It's all within a two-hour drive of Barcelona.

The 1992 Summer Olympic Games are coming to Barcelona. Golf isn't yet an Olympic sport, but great golf has begun to play a major role in Catalonia's economy.

In fact, the PGA TOUR recently named Catalonia its first "Official PGA TOUR Golf Destination" in Europe, one of three worldwide. (The others are the Bahamas and British Columbia).

Catalan golf deserves the recognition. Its courses are excellent, and provide a perfect year-round golf vacation getaway

with something extra: historic, romantic Spain.

Catalonia's heart is its centuries-old reputation for business and industry acumen. Witness Barcelona's success in attracting the Olympics.

Catalonia's quality golf courses provide an excellent link between business and pleasure.

The adventure begins in Barcelona, gateway to Catalonia and base for your golf travel operations. Recover from jet lag, eat a good meal or two, then rent a car and head for the golf courses. The clubs we'll talk about are

semi-private, and welcome Americans. All offer gas-powered golf carts, and English speakers are everywhere.

Go north first, to the rugged Costa Brava. Picturesque fishing villages dot the rocky Mediterranean coast.

Our first golf course, the Club de Golf Mas Nou (pronounced Mas NO) tops its own mountain near the ancient city of Girona.

Distractingly spectacular views of the Mediterranean coast and the Pyrenees present the most treacherous hazard to your game at Mas Nou. The crystal blue sea rolls out to the horizon below. And the Pyrenees rise majestically to the opposite horizon. The course itself is a delight to play.

At the nearby Club de Golf Costa Brava, the charming stone clubhouse is a restored ancient Moorish farmhouse. Cork and pine trees line the fairways on the hilly front nine. The back nine levels out, offering a pleasurable, well-rounded round of golf.

Also nearby, the Club de Golf



Club de Golf de Cerdanya has provided "golf for kings and queens." Today, visitors receive the same royal treatment.



Beautiful trees line the fairways at the Club de Pals.

Pals tempts with beautiful tree-lined fairways and softly rolling greens. That beauty can be deceptive.

After golf, tour the Costa Brava. Visit Girona's Jewish quarter. See the 13th-century city of Pals. At nearby Empuries, Greek and Roman ruins pre-date the birth of Christ by 500 years.

Then there's the Dali Museum at Figueres. Suspend all belief in conventional reality here. On display amidst the surrealist's paintings and drawings is a 1940s-era Cadillac with an internal rain machine — one of Dali's wonderful creations.

And that's the Costa Brava.

Now, for a real change of pace, let's visit the Catalan Pyrenees. Rent a car in Barcelona for a two-hour drive by superhighway to the French border. For a truly European experience, relax in the comfort of train travel.

Near the skiing village of Puigcerda lies the Club de Golf de Cerdanya. Perhaps the most luxurious golf course in Catalonia, this beautiful old club has provided "golf for kings and queens." Today, visitors from everywhere receive the same royal treatment.

Built in 1929, Cerdanya meanders gently through a wide valley. Creative water hazards include a rocky stream, natural irrigation ditches, even rare

golfing in the mountains. Come at the right time of year — late fall or late spring — and golf and ski on the same weekend, even on the same day! No wonder the Catalans themselves are so fond of this area.

The Pyrenees are breathtaking.

The Costa Brava is geared for vacation comfort. But we're just beginning to know Catalonia.

Head south from Barcelona, and you'll find the sandy, Florida-like beaches of the Costa Daurada. Much of Europe spends its summer holidays here, basking

in the sun, and playing on the sand.

There's golf aplenty, too. At the newly renovated Club de Golf Terramar, for example, a walk down the 18th fairway is a walk beside the sea. Terramar's low, white clubhouse faces the Mediterranean as well, with plenty of glass to maximize the view.

The beach city of Sitges is the "Catalan Key West." Or break out the evening wear and visit the Barcelona Casino.

Then it's back to golf.

Near the ancient Roman city of Tarragona is a comfortably American-style golf course. The Club de Golf Bonmont Terres Noves offers white sand traps and barrancos (rock-walled ravines).

water bunkers. Before or after golf, Cerdanya's clubhouse offers rusticity of the most elegant variety.

There's an added bonus to

"This course was hewn from living rock," says Robert Trent Jones Jr., its creator. "Wind is a major factor in the strategy called for in playing this course."

For a change of pace, travel a bit inland to discover Catalonia's own island green — a copy of the infamous 17th hole at Florida's TPC at Sawgrass. The Club de Golf Reus Aiguasverdes (near the town of Reus) features a level layout lined with olive trees, and offers after-golf relaxation in its newly renovated clubhouse.

The golf course nearest to Barcelona represents the final challenge. Here Spanish touring pro Jose Maria Olazabal has designed what may be the most difficult course in Catalonia — perhaps in the world.

Masia Bach is for the stout of heart. Golfers trek up hills and down hills. Blind tee shots must sail over bottomless ravines. The downhill layout of some holes is of scant comfort when others require steep uphill shots. A visit to the nearby Masia



A restored stone clubhouse at the Club de Golf Costa Brava.

Bach winery may well be in order after your round.

Catalonia, Spain, is indeed a special place. Comfortable climate, all the year 'round. Warm, friendly people. Great dinners. Exquisite scenery. And of course, most excellent golf.

For information about Catalonia, write to the Ministry of Tourism, Passeig de Gracia 105, 08008 Barcelona, Spain. ●

The PGA TOUR
recently named
Catalonia its first
"Official PGA TOUR
Golf Destination"
in Europe, one of
three worldwide.



THE PGA TOUR AND SQUARE GROOVES

By Ruffin Beckwith

In the mid-1980s, PGA TOUR players started to express great concern over the effect that square grooves (also known as "box" grooves or U-grooves) were having on the game. As opposed to the traditional V-grooves, square grooves enable professional-caliber players to impart backspin on the ball from conditions where it was previously not possible (such as from the rough), thus eliminating the penalty for driving the ball out of the fairway and effectively changing the nature of the game on the professional level.

After considerable club-testing supported the concerns of many of the players, the PGA TOUR — acting upon its obligation to make the rules that govern its competitions — required the use of V-groove irons in PGA TOUR events. Prior to the effective date of the proposed rule, Karsten Manufacturing and some TOUR players who use golf equipment manufactured by Karsten Manufacturing sued the PGA TOUR, its Commissioner, Deane Beman, and the three independent directors on the TOUR's Tournament Policy Board, the body responsible for adopting the rules pursuant to which the TOUR and its tournaments operate. The lawsuit alleged that the TOUR, in making a rule requiring the use of V-groove golf irons in its competitions, engaged in a conspiracy that violated the federal antitrust laws. In December 1989, the Federal District Court in Arizona enjoined the rule, which was to go into effect on January 1, 1990. For the last two years, the parties have been engaged in substantial discovery which is now coming to a close.

While much has been written about this dispute over the past few years, we think it appropriate to present a com-

plete look at the facts. The facts surrounding the adoption of the PGA TOUR V-groove rule clearly show that there was no conspiracy, no hidden agenda, and no intent to harm anyone, but rather only a desire to highlight skill in PGA TOUR competitions and uphold the highest traditions of the game of golf as played on the PGA TOUR.

THE GENESIS OF THE "GROOVE CONTROVERSY"

Prior to 1984, the USGA's Rules of Golf provided that grooves on the face of golf irons were to be V-shaped.

In the 1970s, it became prevalent among golf iron manufacturers to use the investment cast process to manufacture heads for golf irons. The USGA determined that this process yielded grooves which were not in the shape of a true "V". Rather than declare the clubs made by these manufacturers non-conforming, the USGA, effective January 1, 1984, eliminated the requirement that grooves be V-shaped and permitted grooves to be U-shaped (otherwise known as square grooves). The USGA implemented this rule without any testing to determine what impact such a change would have. Following the 1984 rule change, some manufacturers of golf irons, including Karsten Manufacturing, began to manufacture square groove irons. Shortly thereafter, PGA TOUR players and others began to notice phenomena such as scuffed and cut golf balls and increased backspin on certain shots.

REACTION TO THE "GROOVE CONTROVERSY"

Then, after the fact, the USGA began to study the situation by conducting labora-

tory tests to measure the difference in spin rate between U-grooves and V-grooves. These laboratory tests showed that under grassy and wet conditions U-grooves spun the golf ball significantly more than V-grooves.

In 1987, in response to a questionnaire, the majority of PGA TOUR members indicated that square grooves should not be allowed on TOUR. Based upon these questionnaire results and other information it had received, the PGA TOUR decided that the issue of square grooves merited a much closer look.

The Tournament Policy Board authorized the PGA TOUR staff to retain Independent Golf Research of Austin, Texas, and its principal consultant, David Pelz, a former NASA employee and a well-known golf teacher, consultant and writer, to design and conduct a first-of-its-kind field test using actual PGA TOUR professionals to compare the performance differences of V-grooves and U-grooves. Upon completion of the tests, the field data were submitted to two independent teams of statistical experts at the University of Texas and the University of Delaware. The results of those analyses indicated that U-groove irons imparted significantly greater spin to the ball than V-groove irons under certain conditions, which confirmed the USGA laboratory tests and what PGA TOUR players were reporting from actual experience.

At this approximate time, the USGA adopted a rule (the "30 Degree Method") for measuring grooves which effectively banned only Karsten Manufacturing's PING EYE-2 irons from USGA competitions beginning in 1990. The PGA



Just don't expect it to roar.

In an effort to become swifter and more ferocious, many organizations may be tempted to make superficial changes.

But this approach will rarely improve performance. Especially when information technology is part of the plan.

Which is why Andersen Consulting

works with companies to link technology to the heart of their business. Their strategies, operations and human resources.

Because these days, becoming a more aggressive competitor often means transforming the organization. And not just hopping on a technological bandwagon.

**ANDERSEN
CONSULTING**

ARTHUR ANDERSEN & CO., S.C.

Where we go from here.™

TOUR, believing that it was inappropriate to single out one manufacturer and that any problem which existed was present with respect to all square grooves, decided not to adopt the USGA rule for its competitions.

In May 1988, the PGA TOUR Tournament Policy Board concluded that, based upon all of the information it had at that time, it was in the PGA TOUR's best interests to require the use of V-groove irons in PGA TOUR events effective January 1, 1989, subject to final ratification after a 90-day period during which manufacturers, players and all other interested parties could comment on the rule.

In February 1989, after (i) modifying the technical specifications of the V-groove rule based on comments from certain manufacturers, (ii) allowing the USGA to conduct additional tests (which supported the conclusions reached by PGA TOUR), and (iii) being told by the USGA that it did not intend to take any further action with respect to square grooves, the Tournament Policy Board voted to adopt the TOUR V-Groove rule (as modified).

THE LAWSUIT

On December 1, 1989, Karsten Manufacturing and seven players who used PING irons, filed their lawsuit against the PGA TOUR, Commissioner Beman and the three independent directors. The upshot of the plaintiffs' claims is that, in adopting the V-groove rule, the PGA TOUR conspired with other entities to restrain competition in the golf club iron market and with certain TOUR players to restrain competition in the professional golfer market. Discovery in this case recently ended, and PGA TOUR has filed a motion to

dismiss the claims in their entirety based on the absence of any evidence of conspiracy. Further, PGA TOUR does not manufacture or sell golf clubs and so does not compete against Karsten Manufacturing. In fact, competition in the golf club market is healthier today than it was when the PGA TOUR V-groove rule was adopted. In sum, the adoption of the V-groove rule did not violate the antitrust laws. Despite the fact that it is very confident in its position, the PGA TOUR, since the incep-

tion of the lawsuit, has constantly attempted to resolve the matter short of litigation. Believing lengthy litigation to be damaging to the game and certainly a drain on its own resources, the TOUR offered arbitration as an alternative to trial. When that was rejected, several attempts at settlement were offered, including permitting players to use irons with square grooves that are spaced appropriately so as to perform in a manner similar to V-grooves. This latest proposal would allow PGA TOUR players to use square groove irons on TOUR.

than V-grooves. The TOUR's latest settlement offer addresses both of these concerns. To date Karsten Manufacturing and their attorneys have not accepted the offer. Pending a change in their position, trial is scheduled to begin on November 3 in Phoenix.

It is ironic that Karsten Manufacturing filed a similar lawsuit against the USGA in August, 1989 alleging that the USGA had conspired with unnamed others to violate the antitrust laws. That lawsuit was settled in early 1990 when the USGA agreed to permit Karsten Manufacturing's PING EYE-2's manufactured prior to April 1, 1990 to be forever regarded as conforming under the Rules of Golf.

CONCLUSION

Fundamentally, Karsten Manufacturing and a handful of players have called into question PGA TOUR's right to

make the rules for its competitions. Should it be the sports governing organization which exists to look out for the best interests of its game which makes the rules, or should it be the manufacturers who are grounded in the principle that whatever increases sales is good? Should it be the organization that represents the players and is concerned with the integrity of the game, or should it be someone who sees no reason to limit technology, believing that all technological advance is good, no matter what the cost to the traditions of the game?

A review of the facts surrounding this lawsuit exhibit why the sports governing organization must make the rules for its competitions and why manufacturers cannot be permitted to determine the rules of the game. When the latter occurs, it will not be long before the game will have no rules. ●

Traditional "V" Groove



"U" Groove



Your dentist can't remind you when to replace your toothbrush. That's our job.

Oral-B Laboratories ©1992 Redwood City, CA 94065



Oral-B INDICATOR® Toothbrush



*About 3 months later
(when dentists recommend replacing your toothbrush)*

Although dentists advise you to replace your brush, they really can't be there to tell you when. But the Oral-B Indicator can.

You see, the American Dental Association recommends you replace your toothbrush every three months. They believe strongly that a worn toothbrush is less effective at removing plaque. That's why most dentists tell you to change your toothbrush. And the very reason Oral-B developed the INDICATOR® Toothbrush. The blue band fades with brushing, so you can see when it's time for a new Indicator. It's that simple.

But developing the Indicator was anything but. It's been thoroughly researched over an extensive period with more than 1,500 patients and 300 dentists and hygienists.

Also, like all Oral-B brushes, the Indicator was clinically shown to be unsurpassed at removing plaque versus the other leading brands. Without any sign of gingival irritation or abrasion. No wonder Oral-B is the toothbrush more dentists use.

All in all, the Indicator is another fine example of Oral-B's ongoing commitment to serious dental care.

So listen to your dentist. Replace your brush with the Indicator from Oral-B. It's the ultimate gentle reminder.

Oral-B

The Brand More Dentists Use.

TAKING ADVANTAGE OF THE TANGLES IN TELECOM

How Ron Haan manages to prosper even when his ventures fail

For most shareholders and creditors, the bankruptcy of Telesphere Communications Inc. was a disaster. Last year, local phone companies slowed collections from callers who objected to high charges from often-steamy 900-number lines. That pushed the \$300 million company into bankruptcy, leaving more than \$100 million in unpaid claims and shareholders with worthless stock.

But former Telesphere CEO and major

shareholder Ronald J. Haan isn't complaining. He picked up Telesphere's choicest assets from bankruptcy court for \$17 million last October and promptly parlayed them into a controlling interest in another telecommunications company. It's International Telecharge Inc., an alternate operator services (AOS) company that sells long-distance service to hotels and pay phones, often at a huge markup. Now, just six months later, ITI

says it may also seek bankruptcy protection. But Haan won't go down with the ship, either: Through a complex series of transactions, he has already recouped \$22 million from Dallas-based ITI.

Haan is just one of many entrepreneurs who have wheeled and dealt on the lightly regulated fringe of the U.S. telecommunications industry since the breakup of the Bell System in 1984. But says Jack Lake, a former telecom sales contractor in Orange County, Calif. who is suing a Haan-controlled company in contract dispute: "This is the biggest thing that's happened in the communications industry."

Haan, who declined to speak with BUSINESS WEEK, got his start in Reading, Pa., where, with \$5,000 of borrowed money, he launched a job data bank for college seniors in 1970. But his big opportunity came with the end of American Telephone & Telegraph Co.'s lock on operator services for pay phones and telephone "aggregators" such as hotels and hospitals. In 1987, Haan plunked down \$10 million for a controlling interest in National Telephone Services Inc. in Atlanta, an early player in AOS. Left virtually unregulated after the Bell breakup, such companies sometimes charged several times the benchmark AT&T rate for long-distance calls.

QUICK REBOUND. In October, 1990, Haan, who owned 85% of National, wangled a lucrative buyout for it from Chicago's Telesphere—even though Securities & Exchange Commission filings indicate that the privately held company had never turned a profit prior to the sale. Telesphere paid \$21 million in cash, \$11 million in notes, and 3.3 million shares of Telesphere stock for National, which claimed to have \$153 million in annual sales.

Less than three months later, in January, 1991, Telesphere was so cash-strapped that it turned to Haan for help. He agreed to invest \$7 million, cancel \$12 million of the notes Telesphere owed him, and help Telesphere expand its bank lines. In exchange, he got almost 10 million Telesphere shares, which raised his stake to 37%. He also assumed the titles of president and chief executive. The following August, creditors pushed for an involuntary bankruptcy and in September, Telesphere began a voluntary reorganization.

Haan wasn't sidelined for long. In October, 1991, he crafted a complex deal to buy most of Telesphere's assets from the bankruptcy court for \$17 million. Then, he turned to International Telecharge, which had overexpanded in the AOS business. It was in technical default on its credit agreements and particularly

■ IN JUST SIX MONTHS, HAAN HAS RECOUPED \$22 MILLION FROM FALTERING ITI



HAAN'S CIRCUMNAVIGATION

OCTOBER, 1990 Haan sells National Telephone Services, an alternate operator service company, to Telesphere for \$21 million in cash, \$14 million in notes, and 3.3 million shares of Telesphere

JANUARY, 1991 Haan invests \$7 million in Telesphere and cancels \$12 million in notes, boosting his stake to 37%. Haan is named CEO

SEPTEMBER, 1991 Telesphere declares bankruptcy

OCTOBER, 1991 For \$17 million, Haan buys most Telesphere assets, including his old NTS business, which he sells to International Telecharge Inc. for \$12 million

DECEMBER, 1991 ITI pays Haan \$22 million in advance royalties and loan repayments and boosts his future royalties to \$500,000 per month

APRIL, 1992 ITI warns that it may have to seek bankruptcy protection. As a major creditor, Haan could still end up with part of his original AOS business that he sold to both Telesphere and ITI

DATA: BW, ITI, SEC FILINGS



*After spending a
billion dollars, we've
got exactly what
you're looking for.*

*At ITT Sheraton, we've
created the perfect atmosphere
for business.*

*We did it with a new reservation
system that guarantees you the
room you want, such as a
non-smoking one. We added more
standard features like a coffee
maker in every room, guaranteed
30 minute room service, and a
spacious work area. We renovated
everything from guestrooms to
restaurants. And we offer the most
flexible and rewarding frequent
traveler program, ITT Sheraton
Club International.*

*Everything to serve you better.
After all, it's nicer to do business
when things go your way. For
reservations, call your travel
professional or 800-325-3535.
We spent a billion to make you
feel like a million.*



ITT Sheraton

© 1992 ITT Sheraton Corporation.

ITT SHERATON HOTELS OF LOUISIANA AND TEXAS: LOUISIANA: Sheraton Baton Rouge Hotel • Sheraton New Orleans North Hotel, Metairie • Sheraton New Orleans Hotel • Sheraton Pierremont Hotel, Shreveport • TEXAS: Sheraton CentrePark Hotel Arlington • Sheraton Austin Hotel • Sheraton Corpus Christi Bayfront Hotel • Sheraton Mockingbird Hotel, Dallas • Sheraton Park Central Hotel, Dallas • The Adolphus, Dallas • Sheraton Denton Hotel and Conference Center • Sheraton Crown Hotel and Conference Center, Houston • Sheraton Grand Hotel by Houston Galleria • Sheraton Astrodome Hotel, Houston • Sheraton Grand Hotel at DFW Airport • Sheraton Gunter Hotel, San Antonio • Sheraton Fiesta San Antonio Hotel • Sheraton South Padre Island Beach Resort

receptive to Haan, who had also acquired from the Telesphere bankruptcy estate \$22 million in delinquent notes and receivables owed by ITI. Haan immediately sold Telesphere's switching network to a division of Williams Cos. and sold Telesphere's AOS business and the overdue notes to International Telecharge for \$12 million. Haan then lent publicly held ITI the money to buy him out and \$14 million more to pay commissions Telesphere owed its agents. He also personally paid Security Pacific Bank \$5 million that ITI owed for receivables financing.

FAT ROYALTY. In return, Haan gained control of ITI's board and became chief executive. At the same time, he was promised a royalty of 10% of revenues from the former Telesphere business until the debt was repaid. And ITI agreed to pay a large advance royalty should it gain new receivables financing. That financing came through in December, and Haan soon got \$22 million in advance royalties and loan repayments, allowing him to recoup much of the cash he had used to gain control of ITI. At the same time, ITI agreed to boost monthly royalties to a minimum of \$500,000.

It was good timing, considering ITI's dimming prospects. The company still hasn't issued audited results for the year ended last Dec. 31 but estimates it lost \$40 million before extraordinary items on revenue of \$180 million. On Apr. 15, ITI announced that final results would be delayed until auditors figured out how to account properly for the purchases of Telesphere assets from Haan. The company is in default on several credit agreements, including one expiring in late April. It says if it can't refinance the loans, it may seek bankruptcy protection. The auditors have insisted that ITI's board appoint a special committee to determine whether there were irregularities in its dealings with Haan.

Meanwhile, the AOS business itself is under fire. The Federal Communications Commission has begun regulating AOS operators, requiring them to identify themselves twice at the start of a call to give consumers a chance to hang up, rather than incur steep charges. Another FCC rule forbids electronic "blocking" of access to other carriers by 1997. And there's growing support in Congress to cap AOS rates.

Is this the end of the line for Haan? Hardly. With mounting pressure to cut rates, ITI is slashing costs as fast as it can. But if the company is liquidated, Haan could still profit. As a major creditor, he could emerge from a bankruptcy with a piece of the same AOS business he first sold Telesphere and later peddled to ITI. If he can pull that off, Haan is one slick operator.

By James E. Ellis in Chicago

Legal Affairs

LAWYERS

JONES DAY: DID IT DO ITS DUTY IN THE KEATING AFFAIR?

It pointed out wrongdoings—but still it's being sued by the feds

In February, 1986, lawyers at Jones Day Reavis & Pogue were all set to cash in. The Cleveland-based law firm had signed on to represent Charles H. Keating's Lincoln Savings & Loan of Irvine, Calif., one of the new breed of thrifts profiting from Washington's deregulatory spirit. The firm had assembled a team of 30 lawyers for the lucrative task of reviewing Lincoln's books in preparation for an examination by banking regulators. Jones Day even had the perfect lawyer to head up the work, a Washington partner who had been chief examiner for the federal agency overseeing the thrift industry.

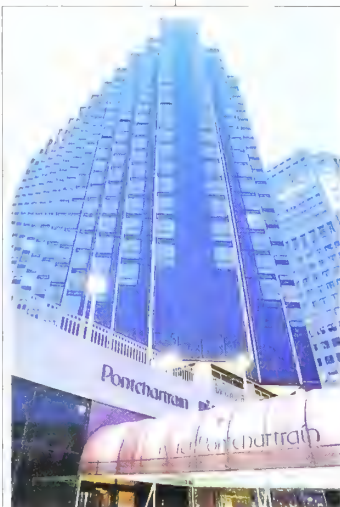
Fast forward six years. The 99-year-old firm of 1,200 attorneys, with such blue-chip clients as Citicorp and Pepsi, finds itself in an unfamiliar role. One of the world's largest law firms is now a defendant in a \$50 million suit filed by the Resolution Trust Corp., the successor to the federal agency that in 1989 closed down the high-flying Lincoln. The RTC wants to hold Jones Day partly responsible for the demise of Lincoln, whose failure is expected to cost taxpayers \$2.6 billion. It's "a garden-variety malpractice claim," says Michael Manning, a Phoenix lawyer representing the RTC.

Yet a review of dozens of documents in the case suggests that Jones Day isn't just another group of professionals blinded by big fees to its clients' misdeeds. Court records show that the firm uncovered numerous irregularities and informed the general counsel about the practices. In fact, its insistence that Lincoln mend its ways and come clean with regulators cost Jones Day an assignment that netted it \$1.3 million in fees before it was replaced by Kaye Scholer Fierman Hays & Handler in July, 1986.

The Jones Day lawyers, who deny any wrongdoing, are in trouble with regulators even though they were shown the door. The RTC says the firm neglected its duty to Lincoln by not informing the thrift's board of the problems it uncovered, especially since some of the abuses involved Lincoln officials. The dispute, which is set for a trial this fall, goes to the heart of the attorney-client relationship. Typically, when a lawyer represents a corporation and suspects a corporate official of wrongdoing, ethical rules suggest that the lawyer take the matter to a higher authority, even to the board. But these are gray areas, and such actions are rare.

In the Jones Day case, the issue was further clouded: The firm had two clients, Lincoln and its parent, American Continental Corp. Jones Day reported the problems in Lincoln's files to ACC's general counsel. But the RTC alleges that ACC was using Lincoln for its own benefit. The RTC argues that Jones Day's failure to inform Lincoln's board was motivated by its "fear of alienating Keating." Jones Day claims that the ethical rules dictate going to the board only when lawyers know of continuing, and not past, wrongdoing.

'BLOODY HARD PLACE.' The case against Jones Day is but one of a slew that banking regulators have filed against the professionals who helped Lincoln and its go-go industry brethren operate at the law's edge. In the most dramatic action so far, the Office of Thrift Supervision in March sought \$275 million in damages from Kaye Scholer. The government had accused the firm of assisting Lincoln's abuses. Facing an asset freeze, the firm quickly settled for \$41 million. But the case prompted the



THE PONCHARTRAINE WAS
SOLD TO INSIDERS
WITHOUT A REGULATORY
O. K., JONES DAY FOUND

merican Bar Assn. to form a task force on Mar. 31 to address the role of lawyers in regulated businesses. "A lawyer is caught between a rock and a bloody hard place," between a duty to clients and loyalty to the state as an officer of the court, says Henry Kellogg, former ABA chief on professional liability.

When Jones Day snagged Lincoln as a client, it was sure to know the rules of the game. William Schilling, the Washington partner overseeing the review team and a defendant in the RTC suit, had headed the examination and supervision staff of the Federal Home Loan Bank Board, then the chief government thrift regulator. Jones Day's role could be circumscribed. It did almost no direct dealings with regulators, reviewing only past loans and investments and giving no advice on prospective deals.

The lawyers quickly detected that Lincoln lacked the documentation that regulators would demand. Dozens of loans, many in excess of \$1 million, had been granted without any risk analysis or proof of the borrower's credit. The S&L often hadn't obtained routine appraisals or cash-flow projections of properties. Jones Day found that a Lincoln employee had back-dated documents and had signed the directors' names on board minutes. The Jones Day lawyers urged ACC and Lincoln's in-house lawyers to notify regulators and to remedy such practices. Thrift officials assured the firm that the irregularities wouldn't reoccur, by court papers.

Among the questionable transactions Jones Day reviewed was the sale, at nearly twice its original price, of the Hotel Pontchartrain in Detroit by one Lincoln subsidiary to a limited partnership whose members included Keating and members of Lincoln's legal department. The thrift hadn't gotten the regulatory approval for such an inside deal. Rather than counsel Lincoln to fight with thrift regulators, as Kaye Scholer would do, Jones Day advised a conciliatory approach. The firm even threatened to resign when it learned its advice against tampering with corporate minutes had been ignored. "We did not urge ACC and Lincoln to embark on a course



JONES DAY'S POGUE: NO OBLIGATION TO ADVISE LINCOLN'S BOARD

WHY JONES DAY IS IN THE HOT SEAT

FEBRUARY, 1986 Charles Keating hires the law firm Jones Day Reavis & Pogue to review whether the loans and investments of Lincoln Savings & Loan Assn. violate federal law

APRIL, 1986 Jones Day tells Lincoln officials the thrift has serious problems with incomplete loan files, back-dated corporate records, and questionable investments

JUNE, 1986 Federal regulators, who had reviewed the same files as Jones Day, notify Lincoln of its potential problems

JULY, 1986 Lincoln fires Jones Day and hires the New York law firm of Kaye Scholer Fierman Hays & Handler. An internal Kaye Scholer memo later suggests that Jones Day had antagonized the thrift's officials with its findings

APRIL, 1987 Federal regulators shut down Lincoln. At \$2.6 billion, Lincoln becomes the largest thrift failure in U.S. history

APRIL, 1991 The Resolution Trust Corp. files a \$50 million suit against Jones Day alleging breach of fiduciary duty for failing to tell Lincoln's board about the thrift's questionable practices. The firm claims it wasn't obligated to tell the board

MARCH, 1992 Jones Day settles a suit by Lincoln bondholders for \$23 million. The RTC case is set for trial in the fall

DATA: BW, RESOLUTION TRUST CORP

of confrontation," says managing partner Richard W. Pogue. "Indeed, our advice was to the contrary."

It was advice that would cost Jones Day its job at Lincoln. In a move that now seems ironic, Jones Day was replaced by Kaye Scholer. An internal Kaye Scholer memo noted that Jones Day's lawyers had a negative view of Lincoln's lending practices and that this had created "a situation of mutual distrust and animosity."

The RTC does not dispute that Jones Day discovered discrepancies in Lincoln's files and brought the problems to

Lincoln's lawyers. But the RTC says the law firm should have done more. "Jones, Day merely acknowledged the existence and the illegality of the abuses to the individuals who were responsible in the first place for the wrongdoing," the RTC argues in court papers.

NO NEST EGGS. Jones Day says it had no duty to go to Lincoln's board. "Jones, Day did exactly what it was asked to do," the firm argues in its court briefs. What's more, the firm counters, Lincoln's board learned of the regulatory problems within months of Jones Day's ouster when federal examiners presented their findings to Lincoln's directors. All in all, the examiners determined Lincoln would be more than \$50 million short of the net worth required to meet federal capital standards. "They're in right on our heels, they find out what we find, and it takes them two more years to close this institution down," says one Jones Day lawyer.

Proving that the law firm's failure to notify Lincoln's board actually led to the thrift's demise could be the government's biggest hurdle. Jones Day gave a preview of its argument in March when it defended itself against similar charges brought by investors who bought ACC bonds. "Jones, Day was going down the track of regulatory advice, it was shunted aside to not deal with the regulators," Los Angeles lawyer Max Gillam told jurors. "Kaye, Scholer took over dealing with the regulators, and Jones, Day did other kinds of work for Lincoln/ACC with no reason to suspect that the client was not following

their advice."

Of course, the best arguments don't always win cases. Jones Day chose to settle the bondholders' suit for \$23 million rather than leave the verdict to jurors. The government case may be different, though. Unlike the bondholders' suit, widows' nest eggs aren't at stake. And the law firm will try to make the government's delay in shutting down Lincoln an issue. If Jones Day proceeds to trial this time, professionals may not have to wait until the next big scandal for some firm ground rules.

By Tim Smart in Washington





If you look closely, you can see yourself. The Accord Coupe. **Honda**

A BIG COMPANY THAT WORKS

J&J'S RALPH LARSEN GIVES HIS UNITS A LOT OF LATITUDE—AND THEY PRODUCE

Marvin L. Woodall likes to keep his distance from the Tower. The independent-minded president of a tiny startup, Johnson & Johnson Interventional Systems Co., prefers to run his 130-person staff from a low-slung building in bucolic Warren, N.J., nearly an hour's drive from his parent company's gleaming 15-story headquar-

ters in New Brunswick. If he wants to fashion a new marketing campaign or hop on a plane to check on European operations, he doesn't think twice. "I just go. I don't ask permission," draws the 54-year-old Texan. "I'm almost never distracted by J&J management."

Most top managers wouldn't like being dismissed as

mere distractions. But at Johnson & Johnson, the presidents of its 166 separately chartered companies are not just encouraged to act independently—they're expected to. Beyond traveling at will, they decide who will work for them, what products they will produce, and which customers they'll sell to.

JOHNSON & JOHNSON
MINT
WAXED
DENTAL FLOSS

CEO LARSEN IS TRYING TO STAMP OUT DISTRACTIONS

124

They prepare budgets and marketing plans, and many oversee their own research and development. While they are ultimately accountable to executives at the Tower, some presidents see headquarters bosses as rarely as four times a year.

Long before the rest of Corporate America made "empowerment" a management buzzword, J&J was practicing it. As early as the 1930s, longtime Chairman Robert Wood Johnson pushed the idea of decentralization. Believing that smaller, self-governing units were more manageable, quicker to react to their markets, and more accountable, the son of a J&J co-founder encouraged such early J&J mainstays as Ethicon Inc., a sutures maker, and Personal Products Co., the feminine-hygiene business, to operate independently. The J&J approach "provides a sense of ownership and responsibility for a business that you simply cannot get any other way," says Chief Executive Ralph S. Larsen.

Because the company has been at it for more than 50 years, J&J has become a model of how to make decentralization work. But the system isn't static. Man-

agement has had to fine-tune its approach over the years to achieve a balance of entrepreneurial spirit and corporate structure. Now, Larsen is in the middle of one such adjustment: He is seeking to share more services among units, cut out redundancies, and smooth relations with J&J's biggest customers. "Everybody is facing a very complex reality," says Harvard business school professor Rosabeth Moss Kanter. "Even if companies want to maintain the identity and autonomy of units that have built up a franchise over long periods, they are also working hard on integration. It's a tremendously tough balancing act."

CREATIVE FREEDOM. J&J's myriad products range from anesthetics and birth-control drugs to Band-Aids, baby powder, and contact lenses (table). Until it was recently sold, there was even a J&J company that made sausage casings. The unassuming Larsen likens his job to an orchestra conductor's: He must give his players inspiration and direction, but the main thing is assuring them abundant creative freedom.

Out of this dizzying variety, J&J's maverick

managers make uplifting music: Last year, while so much of America barely scraped by, J&J boosted earnings 15%, to \$1.5 billion, on a sales rise of 11%, to \$12 billion. Although its share price has tailed off to about 100 with the recent downtrend among drug companies, J&J's stock doubled last year, to 114½. Analysts expect earnings to rise at least an additional 15% this year, while sales, driven by a few important new products, could climb 11% or so. "J&J delivers on the bottom line, and that's what counts," says Rita M. Freedman, health care analyst at PNC Financial Corp.

Unfettered by headquarters bureaucracy, J&J's operating units are easily among the most aggressive marketers in America. Once they choose a market, they storm in and muscle rivals out of the way. A forceful legal department swings into action whenever J&J feels its patents are threatened, and its clout with retailers assures its products superior shelf space. Marketing budgets alone can be overwhelming. Last year, J&J followed Schering-Plough Corp. into the market for over-the-counter yeast-infection drugs by a full

THE DIVERSE ARRAY AT J&J

J&J's 166 operating companies churn out a myriad of products. A sample:

ADVANCED CARE PRODUCTS

FACT PLUS Pregnancy tests
MICATIN Athlete's foot
MONISTAT 7 Yeast infections

ETHICON

LIGATURES
SUTURES

IOLAB

INTRAOCULAR LENSES
MICROSURGICAL GEAR

JANSSEN PHARMACEUTICA

ANESTHESIA DRUGS
HISMANAL ANTIHISTAMINE

JOHNSON & JOHNSON CONSUMER PRODUCTS

BAND-AID
JOHNSON'S BABY OIL
JOHNSON'S BABY POWDER
JOHNSON'S BABY SHAMPOO
REACH TOOTHBRUSHES

LIFESCAN

ONE TOUCH II
BLOOD-GLUCOSE MONITOR

MCNEIL CONSUMER PRODUCTS

PEDIACARE MEDICINES
TYLENOL PRODUCTS

ORTHO BIOTECH

PROCRIT Anemia

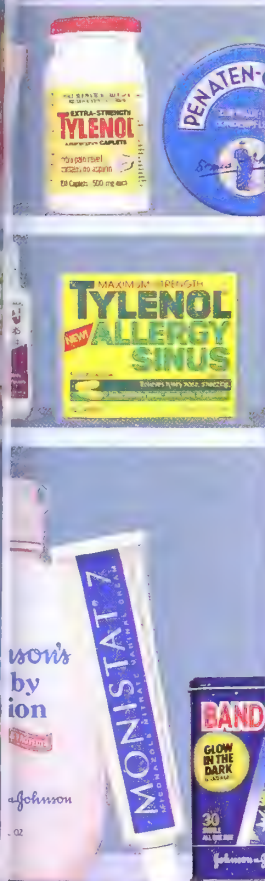
ORTHO PHARMACEUTICAL

BIRTH-CONTROL PILLS
DIAPHRAGMS
RETIN-A ACNE CREAM
TERAZOL 3 VAGINAL CREAM Antifungal

PERSONAL PRODUCTS

CAREFREE SANITARY PADS
SERENITY SUPER PLUS GUARDS Incontinence
STAYFREE MAXI PADS

DATA COMPANY REPORTS



NET WT. 9 OZ

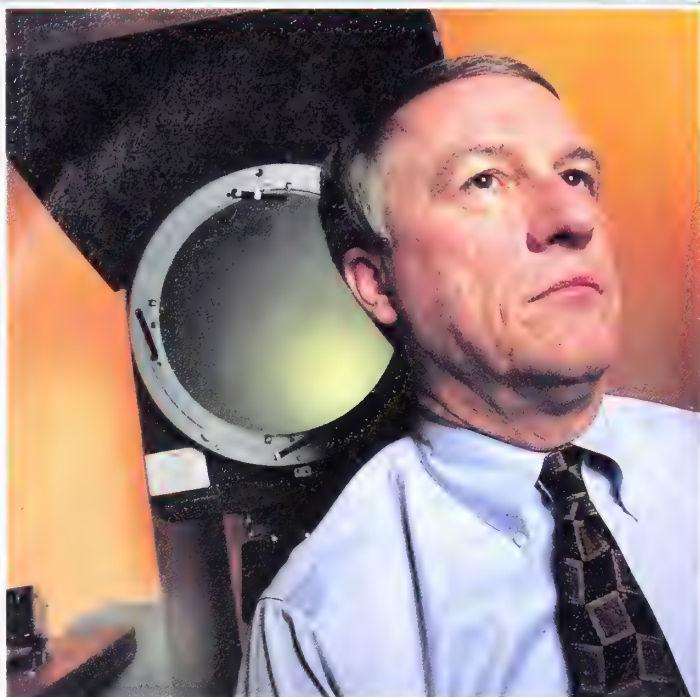
two months. Yet, backed by a massive ad blitz, J&J's Monistat 7 brand soon grabbed more than half of the \$245 million market.

Many other companies are following J&J's lead. Desperate to make itself more competitive, IBM is breaking itself up into smaller, presumably more efficient operating units. Du Pont Co. has been gutting its middle-management ranks and giving survivors more responsibility, with the idea of cutting costs and speeding products to market. PepsiCo is pushing decision-making down to the lowest levels. And Procter & Gamble Co. is backing away somewhat from its 1980s team approach to put more responsibility on the shoulders of individual line executives.

As they will soon find out, however, the J&J idea doesn't come without risks. In this freewheeling culture, company presidents who stumble often find themselves swept aside. Chances for advancement can be hard to come by, especially in a smaller operating unit, because many individual companies want to hire only from within. Then there's the issue of supervision: Operating companies sometimes make costly and embarrassing mistakes that could have been avoided with more home-office guidance. "Entrepreneurial anarchy" is a real danger for decentralized corporations, warns Marc C. Particelli, senior vice-president at consultant Booz Allen & Hamilton Inc.

BULGING OVERHEAD. Decentralization can be especially troublesome in sales. Today, dozens of J&J representatives call on customers such as Wal-Mart Stores Inc. or Kmart Corp. But big retailers increasingly want to simplify their dealings with manufacturers by reducing the number of contacts from the home office. Another top concern for a decentralized company: overhead. Scores of units operating autonomously can lead to duplication in back-office functions. Overhead at J&J is a hefty 41% of sales, compared with 30% for its much more centralized rival, Merck & Co., and 28% for Bristol-Myers Squibb Co.

This isn't lost on Larsen. The 53-year-old CEO, who used to run the company's retail-driven consumer sector, is responding with a relentless attack on duplication. To keep large retailers happy, he has established "customer-support centers." These employee teams work on-site with



'I'M ALMOST NEVER DISTRACTED BY JOHNSON & JOHNSON MANAGEMENT'

MARVIN L. WOODALL, PRESIDENT

J&J INTERVENTIONAL SYSTEMS CO.

retailers to ease distribution and ordering. Although giant customers such as Wal-Mart still get bombarded with sales calls from dozens of different J&J units, at least the goods from most operating companies can be delivered to retailers' warehouses in single large shipments. "We're very excited about it," says James A. Glime, manager of business development at Kmart. "This makes sense, and it certainly supports our business into the 1990s."

Since taking over as CEO three years ago, Larsen has pushed his companies to pool back-office functions, such as payroll processing, computer services, purchasing, distribution, accounts payable, and benefits. In 1989, he launched an effort among U.S. consumer companies to unite customer-service and credit functions. Code-named Pathfinder, it replaced four separate departments that used to do credit reviews, sometimes on the same customers. "If a customer has a question about a delivery, they don't have to call the baby company, then our consumer-products organization, and so on," says Larsen. "They make one phone call to one person who specializes in them, and no matter where the problem is, that

person takes care of it.

Meanwhile, Larsen is leaning hard on presidents to keep hiring from getting out of hand—a troublesome tendency in a decentralized system. "We've been absolutely unreasonable on the addition of head count," he says. His philosophy on hirings in general: "It is not good to add people." From 1984 to 1989, J&J's work force swelled 12%, to 83,100. Since Larsen took over, it has shrunk by about 400 people.

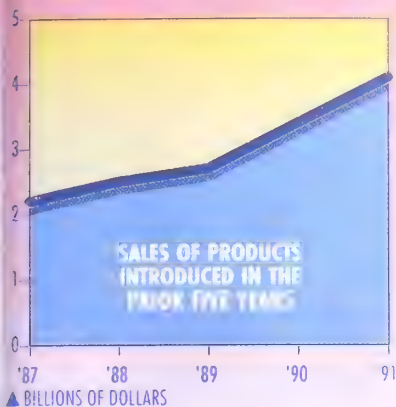
'INSIDIOUS.' To many at J&J, Larsen's consolidation plan is nothing short of heresy. Some promising executives have even left because of them. William C. Egan II, who quit J&J in 1990 after 1 years to become president of the Arm & Hammer division of Church & Dwight Co., argues that consolidation takes

too far "is insidious." As president of Johnson & Johnson Baby Products Co., Egan disagreed with Larsen's 1989 decision to merge it with several other units to form Johnson & Johnson Consumer Products Co. While still speaking glowingly of J&J as an innovator, he complains that "the decentralization I grew up with and thrived on was being put into reverse."

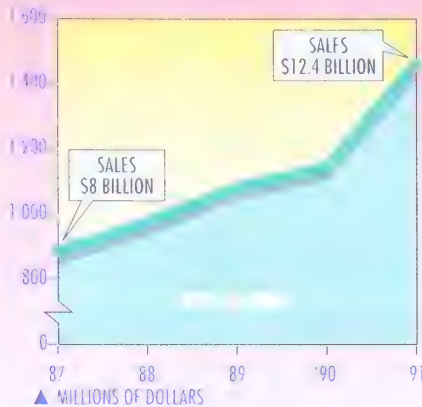
In Larsen's view, he is just righting an imbalance. In its professional segment in Europe alone, J&J had 28 separate units last year because it operated in so many different countries. Now, it is paring them down to a more manageable 18. "Perhaps in the past, decentralization went a bit too far," he says. "We're bringing it back." The value that matter most in the system—freedom to be creative in research, in sales and in staff development—are being preserved, Larsen argues. "We will never give up the principle of decentralization which is to give our operating executive ownership of a business. They are ultimately responsible."

For this reason, J&J's headquarters is home to only 1,000 staffers, about a third of them executives. Directly overseeing the 166 operating companies are 19 company group chairmen, a few of whom work out of Europe. Strategy flows up from the bottom as individual companies set their plans and review them with group chairmen. Above the group leaders are three sector chairmen representing J&J's pharmaceutical, professional, and consumer sectors. They report to Larsen. The CEO also hatches broad strategic plans with a seven-member

A STREAM OF NEW J&J PRODUCTS...

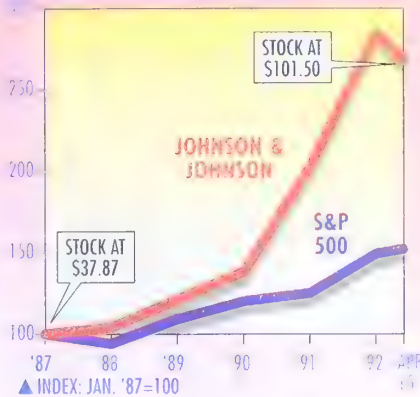


...HAS KEPT THE PROFITS COMING...



DATA: JOHNSON & JOHNSON, BRIDGE INFORMATION SYSTEMS INC.

...MUCH TO INVESTORS' DELIGHT



per executive committee, which includes himself, the three sector chairmen, and three other staff executives.

J&J's controlled chaos suits a company whose *raison d'être* is innovation. Products introduced over the past five years now account for a hefty 25% of sales. When J&J develops or acquires a promising new device or product, the first step is often to set up a division in a larger company to incubate the idea, appoint a management team, and then eventually break out the unit into a freestanding company. That way, the product gets the attention of a dedicated and undistracted management, along with the financial backing of a corporate powerhouse.

SHOTGUN BLAST. The classic example is Tylenol. Seventeen years ago, the pain-reliever from J&J's McNeil Pharmaceutical was little known outside hospitals. Then, rival Bristol-Myers laid down a challenge by coming out with a lower-priced acetaminophen, Datril, and backing it with a full-bore consumer-ad push. J&J countered by unleashing a group of hard-charging marketers who matched Bristol's prices, one-upped the New York company by selling an extra-strength formulation, and used Tylenol's good name with doctors to make it the remedy of choice.

Soon, the Tylenol business grew into a division and then was spun out into the independent McNeil Consumer Products Co. Along the way, it counted Larsen

among its vice-presidents for marketing and for manufacturing. Now, it's one of J&J's most important and innovative companies. It survived the Tylenol-tampering scares of the 1980s with its forthright publicity campaign. And more recently, it staved off a fierce competitive threat from American Home Products Corp.'s Advil brand.

Tylenol's strategy has been to stretch the brand name to its limits: There are now more than 20 shapes and sizes of

Tylenol in five categories—ranging from Tylenol Sinus to Tylenol Allergy and a new grape formulation of Children's Tylenol. Persistent, big-scale advertising assures that Tylenol is uppermost in consumers' minds, and good relations with hospitals keep it popular there—which makes a convincing argument to consumers. The franchise now generates an estimated \$1 billion in annual sales.

'GET PEOPLE CLOSER.' When J&J's entrepreneurial managers get hold of a winning product, they rarely hit a false note. "You need to get people closer to the marketplace so they can come up with the ideas," says James T. Lenehan, 43, who has been president of McNeil Consumer for two years. Because Lenehan has worked on Tylenol on and off since joining J&J in mid-1976, he is close enough to the market that he can sense opportunities quickly. In August, 1990, only four months after Lenehan took over, he rolled out three new cold products—Tylenol Cold & Flu, Tylenol Effervescent, and Tylenol Cold Night-time—to steal a march on the lucrative cold-remedy business.

Given the freedom to succeed or fail on their own, J&J companies can sometimes be a little too aggressive for regulators' tastes. In 1988, the Ortho Pharmaceutical unit sponsored a press conference to promote the wrinkle-fighting abilities of its acne treatment Retin-A before the Food & Drug Administration had approved any such use of the



**"WE HAVE TO KEEP
REMINDING OURSELVES
THAT WE WORK FOR
THE SAME CORPORATION"**

Y.G. PICKERING, PRESIDENT

JOHNSON PHARMACEUTICAL INC.

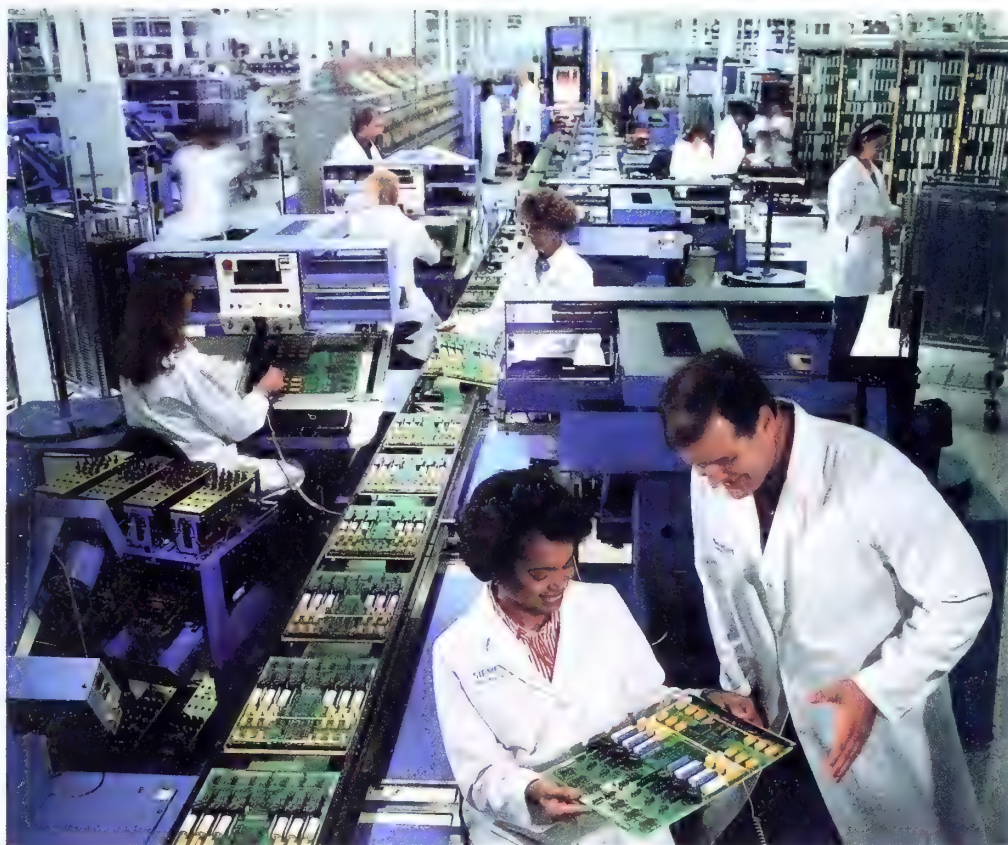
SIEMENS

1847. That was then.



Werner Siemens opens his first factory, a small shop to manufacture the world's most advanced telegraph.

1992. This is now.



All across America, more than 60 Siemens manufacturing and assembly plants are turning out an astonishing variety of high-tech electronic and electrical products with quality American industry can count on. Over 15,000 Siemens U.S. employees have manufacturing jobs in these plants, and are helping to build products in a wide range of fields, including energy, communications, automotive, medical and automation technology. In fact, 13% of Siemens' \$4.5 billion annual sales are derived from exports from these factories to the rest of the world. **Siemens. Precision Thinking.**

For more information, write for *Siemens '92*. Box 8003MG, Trenton, New Jersey 08650.

Automation
Lighting Systems

Automotive Electronics
Medical Systems

Electronic Components
Power Generation

Energy
Telecommunications

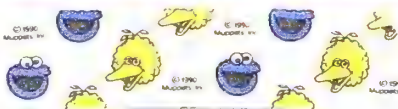
Information Systems
Transportation

medicine. The FDA said this violated its marketing rules and, unable to come to terms with J&J, referred the matter to the U.S. Attorney in New Jersey for investigation for potential prosecution. No action has been taken, and the company declines to comment. On Apr. 9, an FDA advisory committee said a form of Retin-A, to be marketed as Renova, should be approved as a prescription wrinkle cream.

J&J's tough-guy tactics have riled competitors, too. Last year, Lenehan's team rolled out Tylenol PM, a combination painkiller and sleeping pill to compete with Bristol-Myers Squibb's venerable Excedrin PM. In no time, Tylenol's new little blue box cut into sales of Excedrin PM's nearly identical little blue box, becoming a \$60 million-a-year winner. But now, J&J is in court, fighting charges that its copycat packaging was illegal. After losing a first-round fight against a temporary injunction on sales, in late February, J&J got a stay of the injunction pending court action. J&J maintains that it never intended to confuse consumers, and it contends that its packaging did not have that effect.

LOST HEADS. A cool-headed corporate overseer might have avoided a court tussle over Tylenol PM with simple packaging changes, but such a move would have gone against the grain at J&J. Corporate managers, including Larsen, will question their company presidents, but rarely does an executive in the Tower veto people on the ground. That's part of a longstanding tradition. Former Chairman James E. Burke used to love debating strategy with employees, recalls John B. Ziegler, a former J&J company president who now runs the Consumer Brands Div. at rival SmithKline Beecham. "But at the end of the day, if he disagreed, he would say: 'You're running the business, and it's your decision.'"

The risk to company presidents is that bad decisions can cost dearly—especially if they run counter to the wishes of higher-ups. "Guys who raised their heads too high out of the foxhole have had them shot off," recalls one former J&Jer, who says he was ousted from his



Tower post in a falling-out with colleagues. "It's your ass if the idea fails." The upside for successful company presidents: substantial raises and J&J stock options tied to their performance.

The system isn't exactly geared for easy advancement, though. Many junior executives find it tough to move up when young presidents stand in the way, and tougher still to jump over to a separate company. Notes Ross A. Webber, a management professor at the Wharton School, who has worked with J&J executive wannabes in management-development programs: "J&J has always had a chronic problem of career-pathing."

Moves among J&J's sectors—pharmaceutical, consumer, and professional products—are especially difficult. This is disturbing to many within J&J, because aspiring Tower executives ideally need a taste of all three. A new executive-devel-

opment program is supposed to combat the problem by making presidents share their yearly managerial reviews with the Tower, so group chairmen can move talented people from one sector to another. Yet many presidents still want to promote from within their organization first. Lenehan, for instance, says flatly that he prefers to recruit college graduates and develop them internally.

UNIQUE PERSONALITIES. The separate cultures can make executives brought in from other J&J companies feel like outsiders. Larry G. Pickering joined J&J Janssen Pharmaceutica Inc. in 1988 after 16 years at J&J, the last few as chief of Ortho Pharmaceutical's dermatology division. Like different people with kindred values, J&J companies have common standards but unique personalities, he says. The 52-year-old Ortho, narrowly focused on contraceptives, tends to approach things like most mature businesses. Its marketing, for example, sticks to a formula that has worked for years. But the younger Janssen is everything from antihistamines to an-

esthetics, and as such, has a more risk-taking entrepreneurial spirit, Pickering says.

With the help of group chairmen, J&J's disparate units can sometimes find common ground. In 1989, when Janssen introduced the antihistamine Hismanal in the U.S., an executive in the Tower knew that the sales staff of McNeil Pharmaceuticals happened to have some down time. Rather than staff up excessively, Janssen, McNeil's salespeople helped pitch the drug to doctors. But, it underscores the separateness of the outfit: the marketing agreement between Janssen and McNeil was a formal contract, spelling out terms and payments. Says Pickering: "We have to keep reminding ourselves that we work for the same



'YOU NEED TO GET PEOPLE CLOSER TO THE MARKETPLACE SO THEY CAN COME UP WITH THE IDEAS'

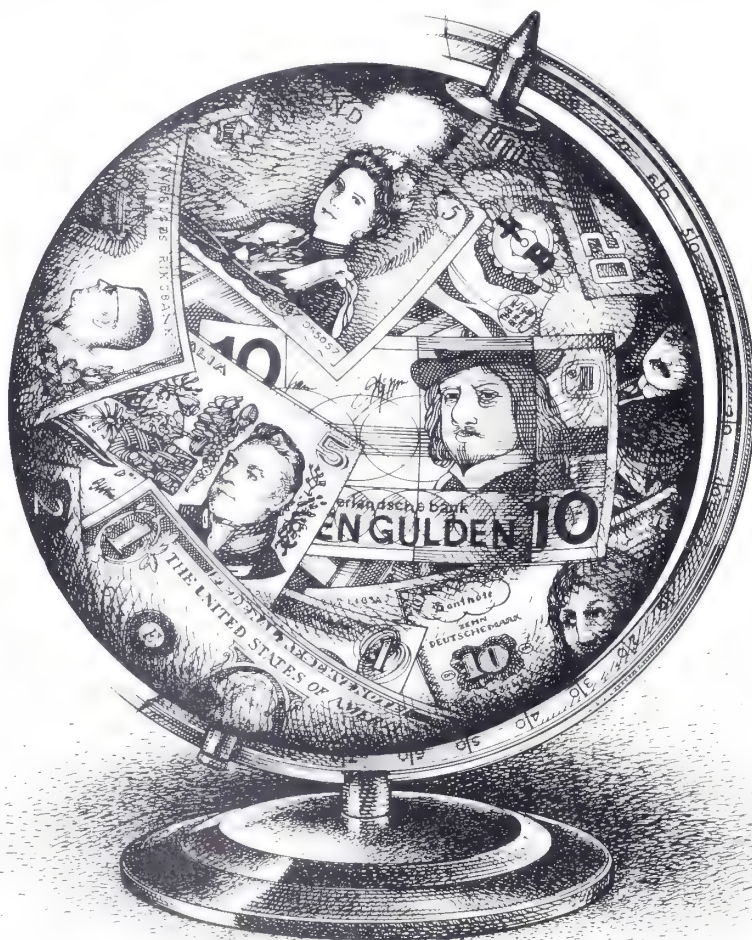
JAMES T. LENEHAN, PRESIDENT

MCNEIL CONSUMER PRODUCTS CO.

corporation."

This is just the sort of cooperation that Larsen is after. Decentralization "is not an end unto itself," he says. Still, he isn't giving up the idea that fast-growing businesses are better off on their own. In February, J&J added yet another company to its list by splitting off its Ethicon Endo-Surgery unit from Ethicon

VAN KAMPEN MERRITT SHORT-TERM GLOBAL INCOME FUND

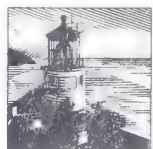


Make The World Work For YouSM

Higher returns on quality, short-term investments are often found outside of the United States. We can help you take advantage of this situation with the new Van Kampen Merritt Short-Term Global Income Fund. It invests in high-quality, short-term foreign and domestic securities denominated in various currencies from stable industrial nations. So you can diversify your portfolio and help reduce your exposure to fluctuations in U.S. interest rates. The result can be a more stable net asset value than

longer-term global bond funds—and you can benefit from favorable market conditions all around the world, not just here.

It's a big world. Turn it into a big opportunity. Ask your investment representative for a prospectus containing more complete information, including charges and expenses. Please read the prospectus carefully before you invest or send money. Or call **1-800-DIAL-VKM (1-800-342-5856) ext. 1111.**



Van Kampen Merritt®

A XEROX Financial Services Company

INVESTING WITH A SENSE OF DIRECTION®

Although the Fund's net asset value will fluctuate as a result of changes in currency exchange rates, the Fund will seek to minimize these fluctuations by maintaining a portfolio of investments that is, on the whole, relatively neutral to fluctuations in the value of the U.S. dollar (relative to an aggregate of the currencies of major industrialized countries). In addition, the Fund intends to engage in hedging and risk management transactions to seek to minimize fluctuations in net asset value which are due to changes in currency exchange rates. The principal value and investment return of Fund shares will vary with market conditions and may, when sold, be more or less than at the time of purchase.SM and ® denotes registered trademarks of Van Kampen Merritt Inc.

Inc. Endoscopic surgery, which uses small incisions and cameras to help in operations, is the rage among surgeons. But Ethicon, which makes products such as sutures and surgical needles, has been fighting intense competition from U.S. Surgical Corp., and J&J felt the fast-growing endoscopic unit would do better if it didn't have to concern itself with Ethicon's problems.

It's little wonder that Larsen wants to stick with decentralization. Since 1980, J&J's yearly profit gains have averaged over 19%, while annual sales have risen by more than 10% in five of those years, including each of the past two. But with so many businesses under his baton, Larsen has to work extra hard to keep everyone playing the same tune. In fact, the company roster can change so fast

that sometimes even Larsen isn't sure how many he has. "We're always folding some company and creating others," he says. Recently, Larsen suggested that the total was 175, only to be corrected by a staffer. As long as the bottom line keeps growing, it doesn't much matter.

By Joseph Weber in New Brunswick, N.J.

HOW J&J'S FORESIGHT MADE CONTACT LENSES PAY

Bernard W. Walsh could see a lot of drawbacks when he was offered the chance to run J&J's Vistakon unit in 1987. Then serving the tiny corner of the contact-lens market for people with astigmatism, the operation garnered barely \$20 million in annual sales. He would have to uproot his family from a cozy town on Philadelphia's Main Line and move to Jacksonville, Fla. Perhaps most worrying of all, Walsh would be building a brand-new company around a pricey, little-known product that Johnson & Johnson was investing millions to produce: disposable contact lenses. "There was a perception of high risk," he admits dryly.

If taking the job was a gamble, Walsh hit the jackpot. Now 49, he's in charge of one of the fastest-growing members of J&J's family of companies. Worldwide sales for Vistakon grew 50% last year, topping \$225 million, mostly on the strength of its Acuvue disposable lens. Analysts say Vistakon has snared a quarter of the \$650 million U.S. lens market alone, and it's No. 1 in the fast-growing disposable segment. Walsh, who came to Vistakon from a cardiovascular-equipment unit that J&J sold, is overseeing 1,800 employees, three times as many as he started with. He's in charge of fields as diverse as operations, marketing, advertising, and research and development. Walsh declines to comment on how his pay has changed, except to say he's "very happy" with it.

Vistakon is a typical J&J success story. Back in 1983, a J&J staffer in Europe got word of new Danish technology to produce disposable lenses cheaply. J&J bought the rights and be-



WITH DISPOSABLE LENSES
PRICEY AND LITTLE-KNOWN,
'THERE WAS A PERCEPTION
OF HIGH RISK'

BERNARD W. WALSH, PRESIDENT

VISTAKON

gan perfecting the packaging and manufacturing process. Within a few years, J&J had quietly assembled a management team and built a high-volume plant in Florida, where it started test-marketing the lens in the summer of 1987. Vistakon quickly set up distribution routes, developed consumer ads, and took the product national in June, 1988, with trial lenses free to anyone who asked. The move was crucial, since Acuvue costs about \$500 a year, including doctor's visits, compared with \$350 to buy and care for conventional extended-wear lenses.

SMALL AND AGILE. The speed of the rollout and the novelty of big-budget ads left giants Bausch & Lomb Inc. and Ciba-Geigy Corp. seeing stars. J&J also had a manufacturing edge with its Florida factory, which could mass-produce thousands of lenses quickly and uniformly. Unable to take competing lenses coast-to-coast for six months or more, rivals conceded Vistakon an ad-

vantage that lingers.

J&J's structure made the guerrilla warfare possible. Walsh's unit was so small that he was able to make rapid-fire decisions on fronts as diverse as production and marketing, with little interference from a bureaucratic headquarters. He could hire ad agencies at will, for instance. Yet because Vistakon was backed

by capital-rich J&J, it could count on the resources needed to attack a mature market with a little-tried and costly product. Kenneth S. Abramowitz, health care analyst at Sanford C. Bernstein & Co., estimates J&J has shelled out at least \$75 million on Acuvue, including buying the rights, building the plant, and absorbing operating losses. He figures the business turned profitable in 1991.

Small though his company may be, Walsh's job just keeps getting bigger. To broaden its product line, Vistakon recently unveiled a longer-wear, pricier product called Surevue. Unlike Acuvue, users cannot sleep with Surevue lenses in place. But they get twice the wear out of them, usually about two weeks, so Surevue is cheaper in the long run. As one of J&J's point men in the optical market, Walsh also must keep tabs on new technologies to make sure his products stay current.

One day, he would like to move into group management in J&J's New Jersey headquarters. That would give him oversight responsibility for a clutch of companies. But he clearly is torn about leaving the field for the home office. "A company presidency is probably the best job in the corporation," he says. "You're left alone to run your own business." That is, as long as you keep stomping the competition.

By Joseph Weber in New Brunswick, N.J.



Live Your Life To Music.

Step Up To The Bose Lifestyle® Music System Now!



The Bose Lifestyle® music system includes Direct/Reflecting cube speaker arrays; Lifestyle® music center with built-in CD player and AM/FM stereo radio; remote control that works around corners and through walls. Also comes with hideaway Acoustimass® bass module (not shown).

Advanced technology that will change the way you enjoy music.

New Bose patented technology, including Acoustimass speaker technology and automatic dynamic equalization, has enabled us to reduce the size and complexity of the stereo system while actually improving performance.



The award-winning Lifestyle® music system replaces an entire rack of conventional equipment and speakers. And its ease-of-use and versatility will enable you to live your life to music in ways you never thought possible.

Enjoy sound quality second only to that of a live performance; audition the Lifestyle® music system.

"No visible speakers, no stack of components, nothing that looks like sound equipment... Hit the start button and suddenly the room fills with music of exemplary clarity and fullness."

— Hans Fantel, *The New York Times*, 1990*

Enjoy music even more with FREE speakers from Bose.

For a limited time, when you step up to a Lifestyle® music system, Bose will send you a pair of Lifestyle® powered speakers (a \$300 value) free. Put them in a second room and it's like having another stereo system, with no additional electronics needed.



We invite you to visit your Bose dealer and compare the benefits of the Lifestyle® music system to much larger, more expensive stereo systems.

And if you already own a Lifestyle® music system, we have a special offer for you as well.

This event ends May 31, 1992. For information, and names of Bose dealers near you, call toll-free:

1-800-444-BOSE Ext. 115

USA, Monday-Friday 8:30AM-9:00PM,

Canada, Monday-Friday 9:00AM-5:00PM (ET)

BOSE®
Better sound through research.

I GOT THE HORSE RIGHT HERE...

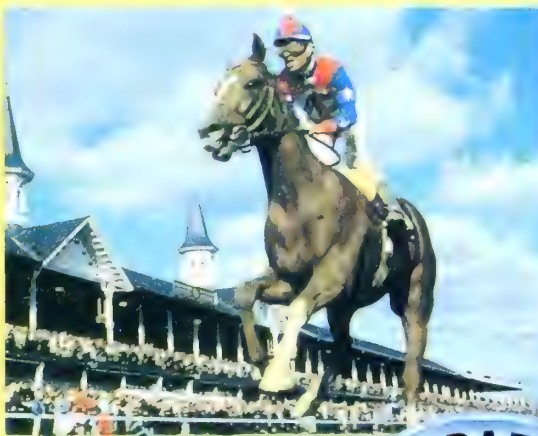
This year's Derby is bringing fresh faces to the owners' boxes

The owners of the horses entered in the 117th running of the Kentucky Derby, scheduled for May 2 at Churchill Downs in Kentucky, are a varied lot. They include an American CEO, a successful rapper, and a rambunctious Japanese entrepreneur. Allen E.

Paulson, CEO of Gulfstream Aerospace and half-owner of Arazi, can count on a close duel with Tomonori Tsurumaki's A. P. Indy. And don't count out Hammer's entry, Dance Floor. For the skinny on their run for the roses, read on:



GULFSTREAM'S PAULSON: IT WASN'T LOVE AT FIRST SIGHT



A CEO WHO'S USED TO MOVING FAST

Allen E. Paulson has been a god-send to the Thoroughbred horse industry. Flush with cash after taking his Gulfstream Aerospace Corp. public in 1983 and then selling it to Chrysler Corp. in 1985, Paulson has pumped more than \$150 million into building his breeding and racing operations while continuing to run the top business-jet maker in the U.S.

Unfortunately for the 69-year-old Iowa native, his timing was less than perfect. The bulk of Paulson's expensive horse-buying came at the horse market's peak. But he admits to no regrets, likening himself to an oil wildcatter: "If you can't afford to drill more than one hole, you shouldn't be in the business." Paulson, who will step down from Gulfstream in June, figures that he improves

his chances by owning lots of horses.

By that logic, his odds must be pretty short. About 150 of his animals are racing in the U.S. and Europe, while 250 more yearlings and foals are maturing at his Versailles (Ky.) breeding center, Brookside Farms. But ironically, his most famous horse, Kentucky Derby favorite Arazi, came by way of the auction barn.

Paulson bought Arazi as a weanling for \$350,000 in 1989 when Buffalo Bills owner Ralph C. Wilson was selling off his equine holdings. "I liked his pedigree," says Paulson. But he didn't immediately fall in love with the horse.

In fact, it wasn't until Arazi started piling up wins on the French circuit last year that Paulson realized just how spe-

cial the colt is. By then, Anthony Stroud, racing manager for Sheikh Mohammed al Maktoum of Dubai, was agitating to buy a piece of the colt. Paulson eventually accepted \$9 million for 50% of Arazi.

Despite the hefty profit, Paulson may regret the deal. Maktoum and Paulson disagree on where the horse should run as a three-year-old before retiring to stud. "I'd like to see him win the Triple Crown," says Paulson.

Maktoum has other ideas. He's bent on winning the Epsom Derby in England, scheduled for June 3 this year, three days before the Belmont Stakes, the third leg of the Triple Crown. A showdown seems inevitable if Arazi wins at Churchill Downs. "My own preference is for Europe," says Stroud.

The decision may lose its urgency if Arazi turns out to be a dud in Louisville. Of course, Paulson won't even consider the possibility. His wife, Madeleine, jokes that her husband would be quite willing to let the horse eat dinner with them. Paulson doesn't deny it. So if May 2 brings a win, his wife may have to set another place at the table.

By Chuck Hawkins in Versailles, Ky., with Richard A. Melcher in London

HAMMER HOOFS IT DOWN TO CHURCHILL

When his three sons were growing up in the ghetto of Oakland, Calif., Lewis Burrell Sr. took them to horse races at county fairs around the state. It wasn't long before they caught the racetrack bug and promised Pops that one day they'd have horses of their own.

His usual reply: "Oh, sure."

Pops is a skeptic no more. One son, Stanley, became famous as Hammer, the dancer and rapper, and the whole family has become rich furthering his career. Some \$5 million of that fortune has gone into the family's Oaktown Stable, which is sending Dance Floor to the Kentucky Derby.

Not bad for an operation that has been in business all of 15 months. In that time, Hammer and family have raked in \$1.3 million in purses. That figure may surprise the racing veterans who dismissed them as easy prey for more experienced judges of horseflesh. That impression was reinforced when Oaktown's first horse, Media Plan, turned out to be a \$450,000 bust. After that, though, the Burrells enlisted the help of pedigree consultants and went on to spend \$1.2 million for the three-year-old filly Lite Light. Six months and

ARAZI

OWNER

Allen Paulson and Sheikh Mohammed al Maktoum

TRAINER

François Boutin

RECORD

9 starts, 8 wins, 1 show

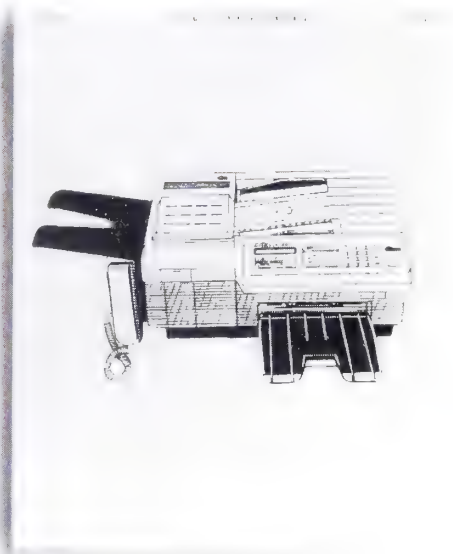
EARNINGS

\$1,117,608

**How does your present fax stack
up against the Mita plain paper fax?**



thermal paper fax



Mita plain paper fax

If the way your thermal faxes curl up is getting hard to handle, get a Mita plain paper fax machine instead ■ A Mita plain paper fax has a resolution of 400 x 400 dots-per-inch, so your images come out as good as if you'd printed them on a laser printer ■ They won't fade or smudge like thermal faxes ■ And with its expandable memory there may not be another fax machine in the world that can stack up to it ■ For more information on Mita's full line of plain paper fax machines, call 1-800-ABC-MITA.



[the image specialist]™



**RAPPER STANLEY BURRELL:
MAJOR WINS IN 15 MONTHS**



expelled from high school for fighting. Within a few years, he was running his own steel-products company. Branching into real estate, he went on to amass a fortune that he estimates, with a nod to the tax authorities, at \$200 million. Business associates figure he's worth four times as much.

In the process of making his fortune, Tsurumaki has managed to alienate many in Japan's business Establishment. "I'm a weed that elite like to step on," he says. "But I'm the one who dares to try new challenges."

One of his most risky ventures is his 100-horse racing operation, into which he sinks about \$7.5 million a year. Some of his equine investments have paid off big: Lindo Shaver, bought at the 1989 Keeneland (Ky.) auction, was Japan's champion two-year-old in 1991.

But in the U.S., Tsurumaki has had only mixed success since his first race 17 years ago. His biggest winner, Fair Judgement, captured the 1989 Citation Handicap at Hollywood Park, Calif. He hopes for far more from A. P. Indy, the colt, sired by 1977 Triple Crown winner Seattle Slew, cost him \$2.9 million at the 1990 Keeneland auction. "Buying a horse takes inspiration," he says. "You have to be willing to take the risk."

If A. P. Indy does capture the roses, Tsurumaki may choose not to bask in the publicity. Leery of anti-Japanese sentiment, he was actually relieved when a U.S. TV network broadcast a photo of the wrong man as the owner when the colt won at Santa Anita on Apr. 4.

By Karen Lowry Miller in Tokyo

a series of impressive wins later, offers of up to \$7 million for Lite Light are rolling in. "It's no longer: 'The Burrells are being taken,'" says Lewis, 52. "It's: 'The Burrells stole something.'"

PACKED STANDS. Perhaps, but the Burrells are giving something back, too. When Hammer showed up for the Blue Grass Stakes at Keeneland on Apr. 11, the Kentucky track set a one-day attendance record. Perhaps those in attendance were hoping for a repeat of Hammer's display last July at Belmont racetrack in New York. To celebrate Lite Light's victory in the Coaching Club American Oaks, Hammer stripped off his turquoise-leather suit jacket, doled out high-fives, and paraded bare-chested through the stands. No victory dance in Kentucky, though—Hammer's horse finished fourth.

The bluebloods who dominate racing have never seen the like. But they're not complaining. Jim Peden, communications director of the Jockey Club, a New York clearinghouse for racing information, says he has "not a shadow of a doubt that Hammer generates publicity that translates into higher attendance."

For all the high-fives and high jinks, though, the Burrells take their racing seriously. Hammer leaves the running of the 18-horse stable to his father and his brothers Louis, 32, and Christopher, 31. And they leave as little as possible to chance. "Why not control our own destiny?" says Christopher.

With the help of a personal computer, he decides where and when to race Oaktown's horses.

Most handicappers don't believe that Dance Floor can

beat Arazi and A. P. Indy. But Hammer & Co. aren't worried. They've already shown racing's know-it-alls that it doesn't pay to underestimate the Oaktown brain trust.

By Alice Z. Cuneo in Oakland, Calif.

A RUN FOR THE ROSES BY WAY OF JAPAN

Come Derby day, Tomonori Tsurumaki may be even more pumped up than the other denizens of the Churchill Downs owners' boxes. The Tokyo-based developer is the first Japanese owner to enter the Kentucky Derby. And no matter where his steed, A. P. Indy, finishes, Tsurumaki will have fulfilled a decades-old dream. "There are no words to describe how excited I am just to be in this race," he whispers.

Tsurumaki, 49, thinks he has only a 50-50 chance of ousting top-ranked Arazi. But this maverick entrepreneur is used to beating the odds. Raised in poverty in northern Japan, Tsurumaki left home for Tokyo at age 15 after he was

DANCE FLOOR

OWNER
Oaktown Stable

TRAINER
D. Wayne Lukas

RECORD
11 starts, 4 wins, 4 shows

EARNINGS
\$636,059

A.P. INDY

OWNER
TOMONORI TSURUMAKI

TRAINER
Neil Drysdale

RECORD
6 starts, 5 wins

EARNINGS
\$722,555



**TSURUMAKI: FULFILLING A
DECADES-OLD DREAM**

You're Carrying 4 Tons Of Explosives And People Are Shooting At You.

No problem. You're in an F/A-18 Hornet.

In Operation Desert Storm, two McDonnell Douglas F/A-18s were able to engage and shoot down two enemy MiGs, even while loaded down with several tons of bombs

and missiles. Then the

F/A-18 pilots

went

on to

complete their

real mission: Bombing an

Iraqi airfield. The F/A-18 Hornet is just

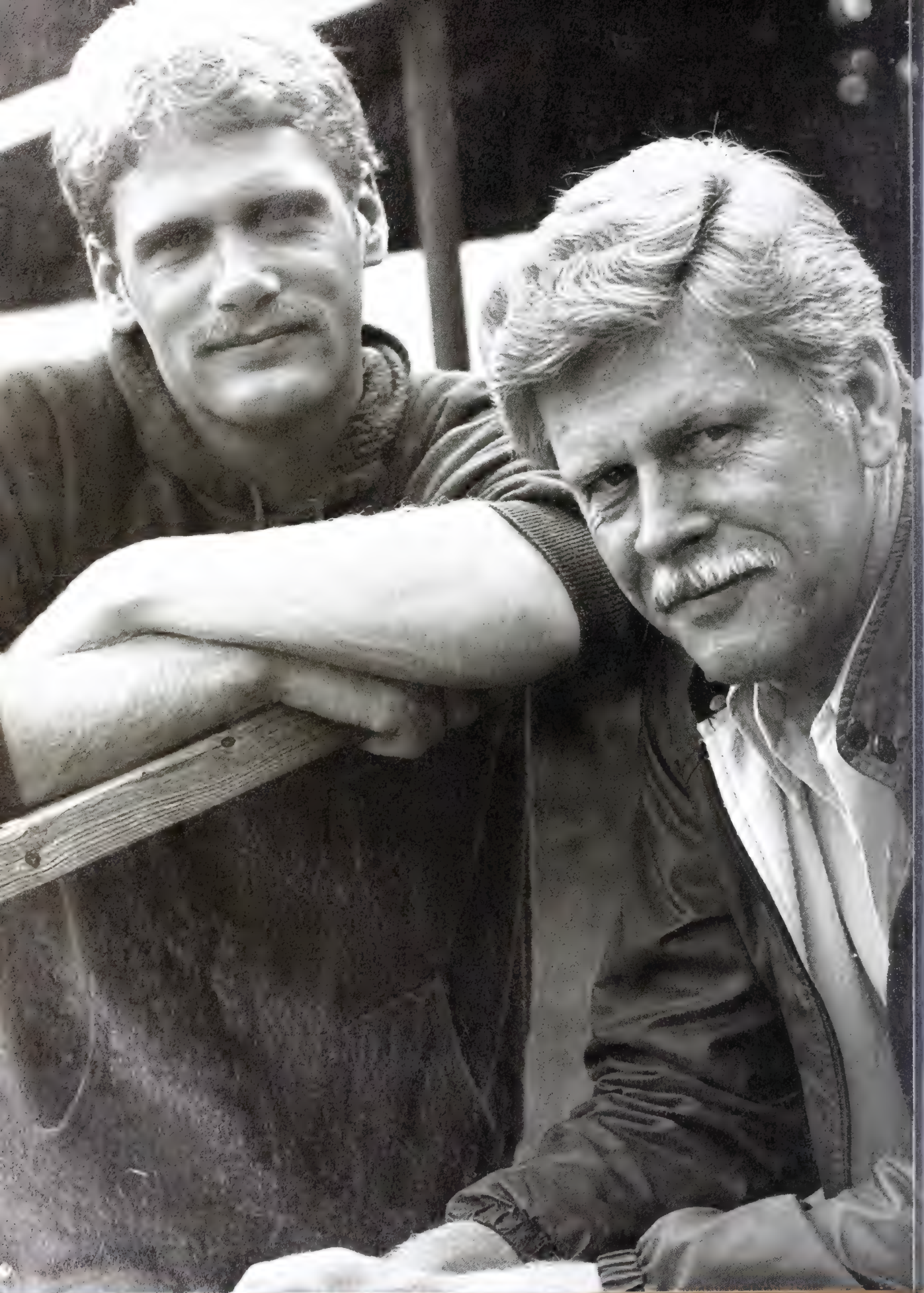
one in a long line of McDonnell Douglas success stories — from the dependable Delta Rocket to the fearsome Apache. It's this record of proven performers that has made us a world leader in aerospace technology.

MCDONNELL DOUGLAS

Performance Above And Beyond.

© 1992 McDonnell Douglas Corporation





A promise to make your kids my kids, when you need a weekend off.

A promise that help with a down payment won't require pride as collateral.

A promise to leave you with advantages that I never had.

Nothing binds us one to the other like a promise kept. Nothing divides us like a promise broken. At MassMutual we believe in keeping our promises. That way all the families and businesses that rely on us can keep theirs.



MassMutual[®]

We help you keep your promises.SM

THIS SONIC BOOM IS MADE IN AMERICA

U.S. stereo makers dominate the pricey high-end market

Remember the glory days of American hi-fi, when names such as Marantz and Scott were synonymous with good sound and top quality? Along with the rest of this nation's consumer electronics, most of the once-great brands in U.S. stereo have long since been bought up or driven out of business by the Japanese and Europeans. But in one segment of consumer electronics—high-end stereo gear, where state-of-the-art systems fetch up to \$100,000—U.S. companies increasingly dominate the \$400 million world market.

In the past five years, in fact, small,

log signal that can be amplified to produce lifelike sound. Fueled by such glowing reviews, Madrigal's annual sales have skyrocketed to \$15 million from \$1 million in 1985, with 70% of the total now coming from 40 overseas markets. Dozens of even smaller companies are seeing similar gains.

Why pay so much for a stereo? It's the same urge that leads a concert pianist to shell out \$100,000 for the finest Bosendorfer concert grand, says Mark Levinson, whose first company was taken over by Madrigal and who now designs equipment under the Cello name.

plifiers for the left and right channels and separate power supplies for each amp. The setup weighs a brutish 560 pounds and costs \$22,000. Wadia Digital Corp. hooks its \$8,400 model 2000 digital processor to a compact-disk player with a fiber-optic link usually found in advanced telecommunications gear.

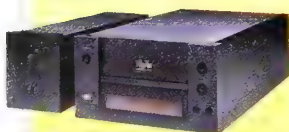
CHEAPER SPEAKERS. A prime reason U.S. companies are so good at making such equipment is the talent they've lured away from other high-tech concerns. Among Madrigal's 195 employees are former IBM engineers and sonar experts from Connecticut's Naval Undersea Warfare Center. Wadia, based in Hudson, Wis., was founded by former 3M Co. telecommunications engineers.

Lately, some high-end stereo companies have been trying to expand their market by appealing to nonaudiophiles with lower-priced products. Apogee Acoustics, which recently introduced a \$60,000 speaker system, also has a \$995 model that incorporates some of its

AN AUDIO LOVER'S WISH LIST

POSSIBLE COMPONENTS OF A TOP-OF-THE-LINE STEREO SYSTEM

COMPACT DISK FRONT END



Wadia WT-2000 transport **\$5,600**
Disk player with optical output for richest sound



Mark Levinson No. 30 Reference Digital Processor **\$13,950**
Advanced electronics convert CD data to pure analog signal

PREAMPLIFIER



Audio Research LS2 **\$2,495**
Mixes transistors and vacuum tubes for a more natural sound

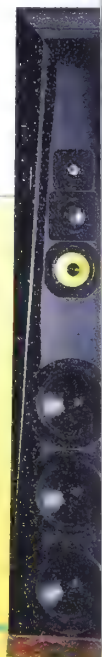


POWER AMPLIFIER

Jeff Rowland Model 9 **\$22,000**
A 560-pound package that delivers an awesome 350 watts per channel

SPEAKERS

Thiel CS5 **\$9,200**
Five-foot-high sloping speakers give realistic delivery of low, middle, and high frequencies



DATA: BW, COMPANY REPORTS

mainly private U.S. companies such as Madrigal Audio, Krell, Wadia, Thiel, and Audio Research have been selling their gear like gangbusters to overseas markets. Their products are even in demand in Asia, where inefficient distribution drives prices to twice U.S. levels. "I doubt most Americans have ever heard of" these companies, says Makoto Fujioka, a leading Tokyo audio journalist. "But Japanese know them."

SWISS PRECISION. One case in point is Madrigal Audio Laboratories Inc. in Middletown, Conn., the 1991 winner of the prestigious Golden Sound award from Japan's *Stereo Sound* magazine, which called Madrigal's \$13,950 Mark Levinson No. 30 digital processor the finest in the world. Such devices convert digital data from a compact-disk player into an ana-

As with fine musical instruments, there are few economies of scale in making top-notch stereos. Production runs are short and usually done by hand with Swiss watch precision. Some companies still even use old-fashioned vacuum tubes, which many audiophiles believe produce a richer sound than transistors. Leads and connections are often made of gold to reduce distortion. "This is American workmanship at its best," says Jeffrey Luk, managing director of Hong Kong dealer Excel Hi-Fi Co.

In most components, there's also a major dose of the latest technology. For instance, Jeff Rowland Design Group's Model 9 amplifier puts out a staggering 350 watts per channel, 10 times that of a midpriced unit. Achieving such power without distortion requires separate am-

big brother's technology and styling. Richard Vandersteen, a former truck driver who 15 years ago founded loudspeaker maker Vandersteen Audio in Hanford, Calif., has a hot-selling \$1,295 model. There are even new digital processors out this year at under \$1,000, about half what the cheapest models used to cost.

Such products probably will never dent the sales of Sony, Matsushita, Samsung, or the other Asian companies that now dominate consumer electronics. But the U.S. companies have proven one thing. In the stratosphere of stereodom, buying American is still the best way to get the sweetest sound of all.

By Tim Smart in Washington, with Neil Gross in Tokyo and Laurence Zuckerman in Hong Kong



A
STRUCTURE WITH A
SOLID FOUNDATION
isn't Ravaged by
TIME
But enhanced.

.....

54 YEARS *experience*. \$50 billion in FIXED INCOME and EQUITIES. A *presence* in GLOBAL MONEY MANAGEMENT – with offices in LONDON, TOKYO and BOSTON. 1.7 million INDIVIDUAL INVESTORS. Over 200 *major* INSTITUTIONAL CLIENTS. And for decades a REPUTATION for offering the *best* service in MONEY MANAGEMENT. Quite an IMPRESSIVE collection of *facts* and *figures*. But EVEN MORE impressive when ADDED TOGETHER. The accumulated result is a SOLID FOUNDATION on which YOU and YOUR ASSETS can *GROW*. YEAR, after YEAR, after YEAR.

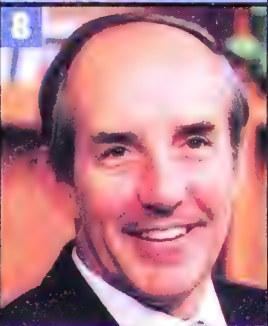
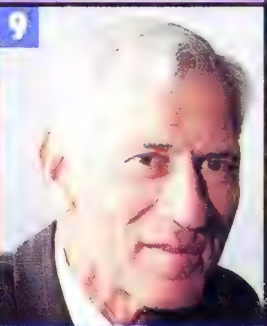


A TIME - HONORED TRADITION
IN MONEY MANAGEMENT

The Putnam Companies One Post Office Square, Boston MA 02109.

WHAT, ME OVERPAID? CEOs FIGHT BACK

SOME DEFEND THEIR PAY, SOME TAKE CUTS—BUT THE OUTCRY KEEPS GROWING

 ANTHONY O'REILLY H.J. HEINZ \$75,085,000	 MARTIN J. WYGOD MEDCO CONTAINMENT \$33,749,000	 LEON C. HIRSCH U.S. SURGICAL \$23,281,000	 JOHN C. MALONE TELE-COMMUNICATIONS \$18,934,000	 RICHARD K. EAMER NATIONAL MEDICAL ENT. \$17,497,000
 SANFORD J. WEILL PRIMECAP \$15,906,000	 HAMISH MAXWELL PHILIP MORRIS \$15,677,000	 WILLIAM P. STIRITZ RALSTON PURINA \$13,813,000	 RICHARD L. GELE BRISTOL-MYERS SQUIBB \$12,658,000	 WILLIAM A. SCHREYER MERRILL LYNCH \$11,530,000

For years, the nation's corporate chieftains adopted the ostrich approach to complaints about their ever-escalating pay. They only begrudgingly and briefly answered shareholders' questions about their paychecks. With few exceptions, they evaded reporters who asked them for comment on their compensation.

No more. Driven out of the sand by shareholders, politicians, and an increasingly frustrated public, some chief executives are beginning to mount vocal defenses of what many consider offensive pay. At one company after another, including Grumman, Ralston Purina, and PPG Industries, CEOs are sounding off at annual meetings, vigorously justifying their pay packages to stockholders. "Companies obviously know that pay is

a hot issue," explains Robert Salwen, a principal of William M. Mercer Inc., a compensation consultant. "They're trying to deflect criticism and take the wind out of the sails of the critics."

MEET THE PRESS. At Coca-Cola Co.'s recent annual meeting, for example, Chairman Roberto C. Goizueta chose to head off any embarrassing queries by devoting much of his prepared remarks to the subject of pay (page 146). After the barrage of publicity that greeted his restricted-stock award, worth \$81 million, he said he felt "compelled, both intellectually and emotionally," to take on the topic. Leon C. Hirsch, chairman of U. S. Surgical Corp., even penned a defensive column for *U.S. News & World Report* on his compensation, which came to \$23 million in 1991. And two weeks before

disclosing the paychecks of its top executives, General Motors Corp. invited the media in for a briefing from its director of compensation—even though Chairman Robert C. Stempel's \$1 million salary and bonus last year was so low that he failed to rank among the 100 highest-paid executives in the nation.

For an increasing number of CEOs there's just no ducking the issue any more. The Securities & Exchange Commission made it an unavoidable topic in February, when it agreed to allow non-binding shareholder votes on executive pay at such companies as Bell Atlantic Corp. and Eastman Kodak Co. Executive pay hasn't cropped up in proxy resolutions since the 1960s, when the Gilberts, those perennial corporate gadflies, unsuccessfully sought to limit the pay of

neral Motors executives to \$350,000 a year. These days, of course, the numbers are much bigger—and so are the protests.

Now, as the issue of pay moves onto the regulatory and political agenda, a growing number of companies have decided that polemics and public relations alone won't make it go away. At some companies, such as Avon and IBM, the boss has taken a cut in pay—aggressively publicized, of course. At others, chief executives have even declined bonuses that are owed to them. UAL Corp. CEO Stephen M. Wolf, widely criticized for his \$18.3 million paycheck in 1990, declined to accept an incentive award last year. And some directors are beginning to scrutinize tire packages more closely. They are raising performance targets, assigning premium prices to stock-option grants, and changing the way they report compensation to shareholders.

All these actions represent Corporate America's collective shudder at the prospect that Washington may ultimately intervene in the donnybrook over runaway executive pay. "I don't think I'd like to see the government come in and try to regulate it," says Detroit Edison Co. CEO John E. Lobb. "But we in industry like to regulate it, and I say that as a CEO and as a director who sits on other companies' boards."

SALARY SLUMP. Those jitters are now beginning to show up in the numbers. For what may well be the first time in the 42 years BUSINESS WEEK has kept tabs on executive pay, the CEO's average salary and bonus went south, falling 7%, to \$1,124,770 in 1991. Of course, the decline occurred in a recession-plagued year in which corporate profits slid by 3% and tens of thousands of managers lost their jobs. But last year marked one of those rare occasions when the average boss's compensation failed to outstrip the paychecks of white-

THE 20 HIGHEST-PAID CHIEF EXECUTIVES...

	Company	1991 salary and bonus	Long-term compensation	Total pay
Thousands of dollars				
1. ANTHONY O'REILLY	H. J. Heinz	\$1,361	\$73,724	\$75,085
2. MARTIN J. WYGOD	Medco Containment	459	33,290	33,749
3. LEON C. HIRSCH	U. S. Surgical	1,351	21,930	23,281
4. JOHN C. MALONE	Tele-Communications	454	18,480	18,934
5. RICHARD K. EAMER	National Medical	1,538	15,959	17,497
6. SANFORD I. WEILL	Primerica	2,234	13,672	15,906
7. HAMISH MAXWELL*	Philip Morris	1,741	13,936	15,677
8. WILLIAM P. STIRITZ	Ralston Purina	1,198	12,615	13,813
9. RICHARD L. GELB	Bristol-Myers Squibb	2,051	10,607	12,658
10. WILLIAM A. SCHREYER	Merrill Lynch	4,500	7,030	11,530
11. WILLIAM E. LAMOTHE	Kellogg	1,852	7,531	9,383
12. LAWRENCE G. RAWL	Exxon	1,813	7,453	9,266
13. CHARLES M. HARPER	ConAgra	4,002	4,749	8,751
14. EDWARD L. HENNESSY JR.*	Allied-Signal	4,113	4,300	8,413
15. WILLIAM W. MCGUIRE	United HealthCare	1,094	6,722	7,816
16. LAWRENCE A. LEHMKUHL	St. Jude Medical	574	7,052	7,626
17. RICHARD B. FISHER	Morgan Stanley	5,300	1,662	6,962
18. LOUIS V. GERSTNER JR.	RJR Nabisco	3,179	3,597	6,776
19. AUGUST A. BUSCH III	Anheuser-Busch	1,879	4,776	6,655
20. H. BREWSTER ATWATER JR.	General Mills	1,431	5,038	6,469

*Retired or resigned

collar professionals, whose pay rose by 5.1%, and inflation, which nudged up 3.1% in 1991.

A rather different picture emerges when you add in long-term compensation, such as stock options. Counting these goodies, the chief executive's total pay jumped by 26%, to a record \$2,466,292. But much of that increase can be attributed to unusually large option gains by a minority of CEOs. Even including long-term compensation, 6 out of 10 chief executives saw their total pay fall from 1990 levels, according to BUSINESS WEEK's Executive Pay Scoreboard, compiled with Standard & Poor's Compustat Services Inc.

But Corporate America's newfound

go unreported because the company may not be required to disclose the pay of a top executive if no longer employs. Some companies give a retiring CEO a grace period of three months to three years in which to exercise his options, a circumstance that would allow the executive to claim his earnings outside the year in which he retires. Since such payoffs don't appear in proxy statements, they aren't reflected in BUSINESS WEEK's estimates for the average chief executive's compensation.

The pay package would probably get quite a boost if this invisible compensation were counted. Besides the \$4.1 million in pay he got last year, Coca-Cola's Goizueta received a million shares of restricted stock, currently worth \$81 million. In cash, Goizueta must merely stick around until 1996, when he is expected to retire. Add that sum to a cache of other grants of restricted stock, stock options, and bonus plans that Goizueta has already received, and he's sitting on nearly \$400 million in future payouts—a sum that does not include \$2.7 million in cash dividends Coca-Cola currently pays him on the 2.4 million shares of restricted

...AND TO WHO AREN'T CEOs

	Company	1991 salary and bonus	Long-term compensation	Total pay
Thousands of dollars				
1. TURI JOSEFSEN Exec. VP	U.S. Surgical	\$749	\$22,887	\$23,636
2. BOB MAGNESS Chmn.	Tele-Communications	454	17,280	17,734
3. DANIEL P. TULLY Pres.	Merrill Lynch	3,825	5,696	9,521
4. JAMES V. MANNING Sr. Exec. VP	Medco Containment	356	8,029	8,385
5. LEONARD COHEN Pres.	National Medical	1,121	7,170	8,291
6. RALPH L. ROSSI Vice-Chmn.	UST	1,469	6,729	8,198
7. HAROLD L. AIRINGTON Vice-Chmn.	Georgia-Pacific	800	6,467	7,267
8. ROBERT F. GREENHILL Pres.	Morgan Stanley	5,300	1,662	6,962
9. JAMES L. MASSEY Exec. VP	Salomon	1,288	4,681	5,969
10. STEVEN R. BERRARD Vice-Chmn.	Blockbuster Ent.	381	5,215	5,596

*Retired

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

'YOU DON'T NECESSARILY GET WHAT YOU PAY FOR'

Biomat Inc. Chief Executive Dane A. Miller and H.J. Heinz Co. Chairman Anthony J. F. O'Reilly have a lot in common. Both are held in high esteem by their industries. Both are major shareholders of their companies. And both are known to readily speak their minds. But when it comes to their views on pay, the similarities end abruptly.

World-class compensation, contends the globe-trotting O'Reilly, provides the incentive to assure world-class performance. Counters a skeptical Miller: "When it comes to executive compensation, you don't necessarily get what you pay for."

A wide gulf of opinion, to be sure—but no wider than the chasm between their respective positions in *BUSINESS WEEK*'s annual pay-for-performance analysis. In an unusual repeat appearance, Miller tops the list as the CEO who gave shareholders the highest returns relative to his pay. He was paid a total of \$712,000 from 1989 to 1991, but shareholders of Miller's fast-growing orthopedic products company scored a staggering 661% return for those three years. O'Reilly's \$81.1 million in compensation, including stock options, dwarfed the 78% return to his shareholders during the period, ranking him dead last.

'GREED COMPLEX.' Surprisingly, Miller doesn't believe he's underpaid. The 46-year-old biomedical engineer was one of four friends who founded Biomat in 1977 with a Small Business Administration loan. Since then, such products as Biomat's replacement hips and knees have profited from the graying of America. Sales and earnings have set records in each of the past 34 quarters.

That has been good news for Biomat stockholders—including Miller, whose 2.8 million shares are now worth \$50 million. So good, in fact, that Miller happily takes a smaller salary than he might and accepts no stock options. "The best way to compensate an executive is through equity,

so he can share the rewards of success just like his shareholders," he says.

The entrepreneur concedes that Biomat's low-salary philosophy may work best with fast-growing companies with surging stock prices. Still, he blasts board compensation committees at big, mature companies that try to offset slow growth by simply giving their CEOs mounting numbers of options or shares. "When you're already holding stock worth \$100 million, what incremental value does an extra 100,000 shares have?" asks Miller. "At some point, you're just satisfying an uncontrollable greed complex."

Heinz's O'Reilly begs to differ. By exercising

part of his hoard of options, he made \$75.1 million last year, though his base salary was only \$514,000. But since many of those options were up to 10 years old, O'Reilly calls *BUSINESS WEEK*'s methodology "fallacious."

"We're not talking about a three-year performance," he says, "we're talking about a 10-year performance. If I had been given three-year options, I wouldn't have gotten \$75 million. I'd have earned very little money." In the 10-year period, Heinz stock jumped 733%, compared with a 240% rise in Standard & Poor's 500-stock index. Besides, adds an O'Reilly aide, his boss would fare better in the latest ranking if Heinz were simply rebounding from a low base.

That was the case with Detroit Edison Co. CEO John E. Lobb, who edged out Miller as

the executive whose company had the best return on equity relative to its level of CEO pay from 1989 to 1991. The utility's stock price had been depressed by a dispute over cost overruns at a nuclear plant that kept it from raising rates. But in December, 1988, the company reached a settlement with Michigan regulators, boosting rates and sending its stock soaring. The good times won't last forever: By Jan. 1, Detroit Edison is required to pass along a rate cut. Yet even if Lobb's hot streak cools, shareholders can't grouse about profligate spending on his pay. Lobb was paid a total of only \$1.3 million from 1989 to 1991.

STAR SYNDROME. A moderate salary didn't prevent Texas Instruments Inc. CEO Jerry R. Junkins from gaining the dubious honor of providing the lowest corporate performance relative to his pay. Junkins earned just over \$2 million in the past three years, but TI has been hammered by several years of lackluster demand and brutal pricing for semiconductors. Last year, it posted its biggest net loss ever, \$409 million, thanks in part to heavy investment in R&D and plants. "Because of these investments, TI today is a stronger, more competitive company," argues Junkins. For that matter, Wang Laboratories and Unisys, whose performance has been much worse than TI's and whose CEOs have gotten more pay, dropped out of the sample because their market capitalizations have fallen below the cutoff point for the survey.

Biomat's Miller says the link between pay and performance seems tenuous because some corporate boards have allowed salaries to mirror those of star athletes. "The difference is that in professional sports you're buying the entity," explains Miller. "People buy Celtics tickets because they want to see Larry Bird, but no one buys a Coke because of its CEO."

By James E. Ellis in Chicago, with bureau reports



MILLER HIGHEST TOTAL RETURN FOR THE BOCK



O'REILLY HIS OPTIONS DWARFED RETURNS



LOBBIA BEST RETURN ON EQUITY RELATIVE TO CEO PAY



JUNKINS WORST CORPORATE PERFORMANCE

ck he now holds. Depending on when Goizueta retires and how Coca-Cola interprets the SEC's disclosure rules, it's possible that many of these awards will never be publicly reported when the CEO takes possession of them.

The BUSINESS WEEK survey examines the pay of the two highest-paid executives at 3 of the largest corporations. A total of 394 of these 6 executives earned more than \$1 million in pay last year. Winner of the pay derby among CEOs: H.J. Heinz's Anthony J.F. O'Reilly, with a record \$75.1 million. The winner among non-CEOs was Turi Josefsen, an executive vice-president at U.S. Surgical, who pulled down the highest pay ever recorded for a female executive.

She made \$23.6 million, thanks largely to a gargantuan exercise of stock options in 1991.

LOT OF GOLD. Josefsen had plenty of colleagues who shared the honors. The biggest moneymakers last year tended to be leaders of companies that have shaken out strong claims in the health-care business, including Humana, Bristol-Myers Squibb, and National Medical Enterprises. Food-industry honchos from such brand-name corporations as Heinz, Philip Morris, Ralston Purina, RJR Nabisco, and General Mills are also heavily represented on the best-paid list. And the upsurge in business on Wall Street helped fuel the pay of bosses at such financial powerhouses as Primerica, Merrill Lynch, and Morgan Stanley.



U.S. SURGICAL'S JOSEFSEN PULLED DOWN \$23 MILLION—MAKING HER THE HIGHEST-PAID FEMALE EXECUTIVE EVER

The second-place finisher in the 1991 CEO pay race was a newcomer, Martin J. Wygod, founder and chairman of Medco Containment Services Inc. in Montvale, N.J. Wygod's annual base salary is \$459,000, but he collected \$33.7 million in total pay for the fiscal year ended June 30, thanks to stock options. Wygod stoutly defends his pay, noting that the market value of the nation's largest mail-order pharmacy has jumped to nearly \$5 billion from \$150 million when he took the company public in 1984. "I put the pieces together and grew the business," he says. "I took a low salary for years because I wanted to make it when everybody else made it." Indeed, Wygod volunteers that he made about \$45 million in all last year—if you count

options he exercised during the final six months of the calendar year, and there's plenty more to come. He currently holds options on 750,000 shares and owns outright nearly 3 million more—a pot of gold worth about \$90 million.

MICKY MOUSE. Noticeably absent from the top pay roster are longtime big winners Paul Fireman of Reebok International Ltd. and Michael D. Eisner of Walt Disney Co. A new compensation contract slashed Fireman's pay last year to \$2 million from \$14.8 million in 1990. Fireman can't complain, however. His new contract came with 2.5 million stock options that already show a paper gain of about \$36 million. A 23% drop in net income at Disney last year shrank

Eisner's cash bonus to a measly \$4.7 million, from \$10.5 million in 1990. His total take fell by 52%, to \$5.4 million last year—not enough to put him among the 20 highest-paid.

Such sums are still huge, of course—especially compared with the \$308,000 pittance pulled down by Dane A. Miller. The chief executive of orthopedic-device maker Biomet Inc. is a rare repeat winner in BUSINESS WEEK's analysis of pay for performance. The survey measures how pay matches up to performance in two ways: by relating the boss's paycheck to total shareholder return and to the company's profitability over a three-year period. For the second year in a row, Miller delivered the most bang for the buck to shareholders (page 144). De-

PAY FOR PERFORMANCE: WHO MEASURES UP...AND WHO DOESN'T

While the public is outraged about the high levels of executive pay, another key issue is how pay matches up with performance. BUSINESS WEEK's two measurement

systems provide useful benchmarks. One relates the boss's pay to total shareholder return. The other relates pay to return on equity and change in return on equity.

EXECUTIVES WHO GAVE SHAREHOLDERS THE MOST FOR THEIR PAY...

	1989-91	Total pay*	Shareholder return**	Relative index
		Thousands of dollars		
1. DANE A. MILLER	Biomet	\$712	661%	1,068
2. GORDON M. BINDER	Amgen	2,211	1,247	609
3. JAMES D. SINEGAL	Costco Wholesale	1,160	602	606
4. JOHN W. BROWN	Stryker	1,330	642	558
5. PHILIP H. KNIGHT	Nike	1,452	456	383

EXECUTIVES WHOSE COMPANIES DID THE BEST RELATIVE TO THEIR PAY...

	1989-91	Total pay*	Avg. return on equity	Relative index
		Thousands of dollars		
1. JOHN E. LOBBIA	Detroit Edison	\$1,280	18.0%	212
2. DANE A. MILLER	Biomet	712	22.9	164
3. ROBERT E. PRICE	Price	759	19.7	113
4. PAUL E. FREIMAN	Syntex	2,521	44.8	88
5. PHILIP H. KNIGHT	Nike	1,452	28.1	86

...AND THOSE WHO GAVE SHAREHOLDERS THE LEAST

	1989-91	Total pay*	Shareholder return**	Relative index
		Thousands of dollars		
1. ANTHONY O'REILLY	H.J. Heinz	\$81,107	77.9%	2.2
2. MARTIN S. DAVIS	Paramount Comm.	22,951	0.6	4.4
3. LEE A. IACocca	Chrysler	11,965	-42.7	4.8
4. STEPHEN M. WOLF	UAL	22,261	33.1	6.0
5. RAND V. ARASKOG	ITT	20,887	24.3	6.0

...AND THOSE WHOSE COMPANIES DID THE WORST

	1989-91	Total pay*	Avg. return on equity	Relative index
		Thousands of dollars		
1. JERRY R. JUNKINS	Texas Instruments	\$2,035	-6.4%	-113.0
2. MARTIN S. GERSTEL	Alza	1,253	0.7	-105.0
3. LAURENCE A. TISCH	CBS	4,059	-5.4	-54.6
4. ROBERT F. DANIELL	United Technologies	5,178	-1.1	-41.1
5. KENNETH H. OLSEN	Digital Equipment	2,927	0.9	-40.6

*Salary, bonus, and long-term compensation paid for entire three-year period

**Stock price at the end of 1991, plus dividends for three years, divided by stock price at the end of 1988

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

troit Edison's Lobbia also fared well in the study. Who delivered the least? Heinz's O'Reilly and Jerry R. Junkins, head of Texas Instruments Inc.

For O'Reilly and most CEOs drawing the heftiest paychecks, the largess results from exercising stock options, some granted as long as a decade ago. Many executives argue that it's unfair to include such income in one-year compensation. "It is absurd to say the pay of somebody is the same as what they earned in the year they exercised options," protests O'Reilly. "It is financial illiteracy of the highest kind."

Ignoring these lavish gains, however, would be financial idiocy. After all, the profits on exercised options are publicly reported and taxed as annual income. They are also typically the reward of the managerial elite, largely unavailable to

either the rank and file or middle managers whose efforts are critical to a company's performance. Indeed, the options granted to CEOs often far eclipse those handed out to the rest of senior management combined. O'Reilly, for instance, was given options on 8.6 million Heinz shares in the past decade—more than twice those granted to the company's four other top executives.

'WINDOW DRESSING.' To solve the problem of a one-year blip in pay, some corporations are changing the way they report option gains in their proxy statements. This year, B.F. Goodrich, IBM, and Bristol-Myers Squibb Co. provide investors with what they call an "annualized" gain from stock-option exercises. The upshot: an option that yielded \$9.2 million to Bristol-Myers Chairman Richard L. Gelb is shown as only

\$1.2 million on an annualized basis. Critics, however, contend that such reporting is little more than an attempt to make outsize rewards more palatable.

Indeed, offering more information via proxies is becoming quite a trend—provided, that is, that the additional detail places a company's compensation practices in a better light. For the first time, for example, American Express and many other corporations are reporting pay for both the current and preceding years. That way, investors will know their chief executives took pay cuts. (C went even further, reporting the cash pay of Chairman Stempel for three full years. The company said Stempel's \$1 million paycheck in 1991 was 31% lower than 1990's, and 44% below 1989's.)

There's still plenty of clever avoidance, though. Many companies that a

COMP COMMITTEES, OR BACK-SCRATCHERS-IN-WAITING?

As Coca-Cola Co. shareholders cheered, Chairman Roberto C. Goizueta strongly defended his award of \$81 million in restricted stock at the company's Apr. 15 annual meeting. What Goizueta neglected to mention is that a director who helped initiate the unprecedented award is a longtime business associate whose investment banking firm has gotten millions in fees from Coca-Cola.

Coca-Cola is hardly unique. At a spate of major corporations, including AMR, Primerica, and Philip Morris, potential conflicts loom large in the boardroom. Attorneys and investment bankers commonly sit on the sensitive compensation committees of such corporations even though their firms regularly do business with the company.

TOO COZY? For years, gadflies have decried the cozy relationships that chief executives forge with their boardroom buddies. Now, even the most conservative observers are coming to agree that members of the compensation committees should be beyond reproach. They argue that directors are unlikely to question outsize bonuses if their firms are

doing millions of dollars in business with the company. The desire to protect such business relationships, they say, may color these directors' judgments.

"The compensation committee should be squeaky clean," says Thomas J. Neff, president of executive search firm SpencerStuart. John M. Nash, president of the National Association of Corporate Di-

rectors, is even more adamant. "Attorneys, accountants, and investment bankers who do business with the company shouldn't be on the board, period, never mind the comp committee," he says. "They have a conflict and a vested interest. They can't be fully independent."

Board directors counter that it's unfair

to jump to such conclusions. They point out that business dealings with directors must be disclosed in the company's statement—as required by the Securities & Exchange Commission. Given such disclosure, says an AMR Corp. official, "there's absolutely no reason why we can't hire the best qualified law firm because one of our directors happens to be a partner there."

Agreeing with him is Kenneth Bialkin, a Primerica director who is a partner with Meagher & Allen, which does legal work for Primerica. "It's not realistic to make too much of this, because in the things that turn out, the integrity of the people involved is what counts," he says. "There's no ipso facto case to draw."

OLD PALS. For critics, though, Goizueta's \$81 million award may be a case in point. Goizueta and Herbert Allen, a Coca-Cola director, have been friends since 1982, when Coke paid \$8 million for Columbia Pictures Entertainment Inc. At the time, Allen chaired the company while he remained president of his family's investment banking firm. In the past six years, Allen & Co.



COKE'S GOIZUETA AN OLD ASSOCIATE, HERBERT ALLEN, HELPED INITIATE HIS AWARD



HERBERT ALLEN HIS FIRM MADE \$24 MILLION IN FEES FROM COKE IN THE PAST SIX YEARS

ounced pay cuts for their top executives neglected to mention that these CEOs received sizable stock-option grants that more than make up for the short-term cut in pay. "A lot of the pay cuts are window dressing," says Alan M. Johnson, managing director of GKR International. "For every dollar executives seem to be giving up, they seem to be getting \$2 to \$5 in stock options or restricted stock." At Phillips Petroleum Co., for example, Chairman C.J. Silas saw his salary and bonus fall by 36% last year, to \$825,000. Read through the minutiae of the proxy, however, and you'll discover that Silas also received 3,552 shares of restricted stock worth over \$900,000, and that he exercised options for a gain of \$1.3 million.

If anything, critics say, proxies and pay programs are becoming even more opaque. "Increasing attention is being paid to packaging compensation so that

it doesn't get the shareholders' attention," complains Sarah A. B. Teslik, executive director of the Council of Institutional Investors. "We're seeing more complicated packages and more finely tuned efforts to obfuscate the actual amount of pay."

SLEIGHT OF PRINT. Coca-Cola, for example, buried its grant of restricted stock worth more than \$80 million to Chairman Goizueta in a paragraph of dense prose, rather than highlight the grant in a table as many companies do. Coca-Cola also chose not to report the award in numbers, but instead referred to it as "one million" shares of stock, making it more difficult for an investor to find.

Westinghouse Electric Corp. gained headlines with its report that the salary and bonus of Chief Executive Paul E. Lego was slashed by \$1.5 million in 1991, a year in which Westinghouse posted a loss of \$1 billion. At the same time, the

company doled out two megagrants of 350,000 stock options to Lego, one at a price of \$16 a share and another at \$28.56. Westinghouse, however, makes no mention of the two separate grants in its latest proxy statement. Instead, it reports only that Lego got options on 700,000 shares at an average price of \$22.28 each. With the Westinghouse stock trading at \$18 a share, investors would likely conclude that Lego's grant is worthless—when in fact it's already worth about \$700,000. "We're not trying to hide anything," says Edwin F. Goff, a compensation director at Westinghouse. "This is the way we've always done it."

Or consider ITT Corp., harshly attacked last year by shareholders for rewarding CEO Rand V. Araskog with a multimillion-dollar pay package when the company's profits had been sagging. In 1988, the company granted Araskog 120,000 shares of restricted stock that

valued nearly \$24 million in investment banking fees from Coke-related deals, including \$10 million when Coca-Cola sold its largest U.S. bottler to the public. All in all, Allen has served as the chair of Coke's compensation committee, a group that sets the pay of Goizueta and his top lieutenants.

An investment banker insists there is no conflict between his company's position on the board. Allen points out that he and other directors are big Coke shareholders who wouldn't do "anything to reduce [the value of] their shares." Besides, he says, "our company has done a lot of work, and the transaction we were involved in was beneficial to Coke shareholders." He and other directors vigorously defend the award to Goizueta. Adds Allen: "This gentleman with a 30-year record with the company clearly recognizes his past achievements."

Others, however, believe the relationship has at least the potential to influence Allen's compensation decisions. "I don't understand why it's not illegal," says Sarah A. B. Teslik, executive director of the Council of Institutional Investors. "Of course that affects you, if you don't realize it. It just doesn't happen."

JOHN GALORE. But it does—and it's one of the best-known public relations firms. When Philip Morris last year doled out options on 100,000 shares to retiring Chairman Hamish Maxwell—options already worth \$10.4 million—it drew eyebrows. What went unre-

ported was that Philip Morris' pay panel includes lawyer Robert E. R. Huntley of Hunton & Williams in Richmond, Va. In the past three years alone, the firm has received \$24.4 million in legal fees from Philip Morris. Asked for comment, Hunt-

ley says: "I don't comment on the business of boards on which I sit."

The list goes on: The director who heads the stock-option committee at Waste Management Inc., where top executives have raked in millions in option gains in recent years, is a former vice-president of the company and draws an annual consulting fee of \$127,500 from the firm. A company spokesman denies any conflict. At Pennzoil Co., the stock-option committee chairman is Allen H. Carruth, a partner in insurance agency John L. Wortham & Son. His firm has collected over \$3 million in commissions in the past five years for placing insurance for the company. At Valley Bancorporation in Wisconsin, Oscar C. Boldt, chairman of Boldt Group Inc., sits on the comp committee even though Valley has done millions of dollars in business with companies affiliated with Boldt. The bank is paying \$1.4 million to a Boldt-affiliated partnership for office space under a five-year lease. Another Boldt company is doing a \$3 million renovation of a Valley bank. Boldt sees no conflict. "We have a \$300 million business, and that contract is only 1% of it," Boldt says. "I don't think I'm influenced at all by the business we do with them."

So far, few stockholders are complaining. None asked Goizueta about his windfall at Coke's annual meeting. But as public outrage over CEO pay mounts, shareholders have reason to wonder just how impartial the hands that write those fat paychecks really are.

By John A. Byrne in New York and Walecia Konrad in Atlanta

DIRECTORS WITH POTENTIAL CONFLICTS

Many observers say directors who sit on the compensation committees that set the boss's pay should be completely independent. Yet many lawyers, investment bankers, and consultants draw fees from the companies on whose compensation committees they serve

Company/Director	Potential conflict
AMR Dee J. Kelly	Senior partner of law firm that provides legal services to AMR
COCA-COLA Herbert A. Allen	His firm has drawn nearly \$24 million in investment banking fees from Coca-Cola subsidiaries
ENRON Joe H. Foy	Retired senior partner of Houston-based law firm retained by Enron
MERCK Dennis Weatherstone	Chairman of J.P. Morgan, which performs banking services for Merck
PENNZOIL Allen H. Carruth	Officer with insurance firm that received over \$3 million in fees from Pennzoil
PHILIP MORRIS Robert E.R. Huntley	Lawyer whose firm received \$24.4 million in fees from Philip Morris
PRIMERICA Kenneth J. Bialkin	Partner with law firm that provides legal services to Primerica
RJR NABISCO Vernon E. Jordan Jr.	Senior partner of a Washington-based law firm that provides legal services to RJR
VALLEY BANCORP. Oscar C. Boldt	Chairman of firm doing a \$3 million renovation on a Valley bank
WASTE MANAGEMENT Peter H. Huizenga	Former Waste vice-president who is paid \$127,500 in annual consulting fees by the company

DATA: BW, COMPANY REPORTS

Special Report

was to vest in 1991. The company moved up the vesting period to 1990 to allow Araskog to avoid a rise in personal income taxes in New Jersey, where he is a resident, and to reduce ITT's corporate taxes. The company, however, failed to disclose either the change in the vesting period or the actual vesting of the award. An ITT spokesman says the company did not disclose the vesting because "it is not considered a significant compensation matter."

The result: Araskog's compensation in 1990 was \$6.7 million more than the \$7 million disclosed in that year's proxy statement.

ROLLBACKS. In a few rare instances, shareholders are seeking to roll back lavish stock awards. At Jefferson-Pilot Corp., the insurance concern based in Greensboro, N. C., a dissident shareholder group won a court ruling early in April that rescinded about \$11 million in stock awards to CEO W. Roger Soles. The group had sued the company, charging that management lied to shareholders in its 1990 proxy statement when it inaccurately described a grant of stock to Soles as restricted. "These guys only spent about two to four minutes approving the compensation plan, according to depositions," says Louise Price Parsons, who heads the dissident shareholder group and whose fa-

ther once managed the insurer. "That's not even time to read the plan, let alone discuss it."

Jefferson-Pilot says that it made a simple error in describing the plan and that it intends to appeal the decision. And in any case, Jefferson-Pilot is asking shareholders to ratify the 1990 stock-option plan at its May 4 annual meeting. Grouses Parsons: "They're asking shareholders to ratify something that the judge found illegal. We are going to give shareholders a unique opportunity to vote on executive compensation."

Unique isn't exactly the way to describe it. Questions about pay are popping up all over. At the Apr. 17 annual meeting of Grumman Corp., the defense contractor, one shareholder complained that bonuses and stock options received by the company's management could have instead been used to reduce the

need for 11,000 cutbacks in staff in the past five years.

Investors at several other major corporations, including Aetna Life & Casualty and IBM, are voting on nonbinding resolutions to rein in pay. Most observers say chances are slim that such proposals will garner many votes. At Baltimore Gas & Electric Co., for instance, only 12.7% of shareholders voted on Apr. 15 for a resolution to cap executive pay

at 20 times the average worker's salary. But the message that such proposals are delivering to corporate boardrooms is loud and clear: What the boss makes now matters to shareholders.

The outcry over pay has made many boards sensitive to accusations that they are excessively rewarding their chief executives. At both American Telephone & Telegraph Co. and UAL Corp., boards awarded sizable stock-option grants to Robert E. Allen and Wolf, respectively. In both cases, however, the majority of the options were pegged above the market price of the stock. Of the options on 225,000 shares granted UAL's Wolf, for example, 75,000 have an exercise price of \$147.88, the price of UAL stock at the time the grant was made. The strike prices of the other options rise 13% compounded annually, lifting the exercise price to \$170.06 on 50,000 shares in 1994, to \$195.57 on another 50,000 shares in 1995, and to \$224.90 on the final 50,000 in 1996. By pricing the options at a premium, the board has ensured that UAL shareholders benefit before Wolf does when their stock appreciates in value.

That's a meaningful change in compensation policy at UAL—and surely a step beyond pulling one's head out of the sand only to snap back at the critics of pay. Until more chief executives and board directors exercise greater restraint, however, you can expect to hear to rise further in the ongoing debate over executive pay.

By John A. Byrne in New York, with bureau reports

THE GAP BETWEEN
SHOP FLOOR AND
EXECUTIVE SUITE IS
STILL WIDENING—
AND THAT'S NOT
COUNTING
UNDISCLOSED
PAYOUTS

COMPENSATION SCOREBOARD GLOSSARY

If the system worked perfectly, executive pay would rise when the boss delivers the goods for shareholders. And it would fall when corporate performance declines. But it doesn't always happen that way.

In this Scoreboard, BUSINESS WEEK, with Standard & Poor's Compustat Services Inc., attempts to measure how closely pay matches performance. The study uses two approaches: It compares an executive's total compensation

with the company's total return to shareholders in stock appreciation and dividends over three years. A second comparison measures pay against corporate profitability for the same period. Three years of data are examined to minimize the impact of single-year windfalls.

The Scoreboard companies boast market values that are among the 500 largest in the latest BUSINESS WEEK 1000 for which 1991 compensation data are available. Each compa-

ny is assigned to one of nine industry groups. Then, each executive's pay, the company's total return to shareholders, and the company's profit record are measured against the others in the group.

Performance ratings are given only when three years of data are available. On a scale of 5, 1 indicates the best performance; 5 is the worst. The top 15% of the sample receives a 2, 30% a 3, 20% a 4, and 10% a 5.

1989-91 PAY-PERFORMANCE ANALYSIS

PAY VS. SHAREHOLDERS' RETURN

Total compensation is the sum of an executive's salary, bonus, and long-term compensation for the three years.

Value of \$100 invested is the yearend 1991 value of a \$100 investment in the company made three years earlier, including both share-price appreciation and dividends.

Rating shows how an executive stacks up against industry peers, measured in terms of pay relative to total return to shareholders. The rating is based on an index in which the value of the investment at the end of the three-year period is divided by an executive's total pay and then compared with other executives in the same industry group.

PAY VS. CORPORATE PROFIT

ROE is the company's average return on common equity over the three-year period.

Change in ROE is the improvement or decline in the company's profitability over the 1989-91 period, expressed in terms of a percentage.

Rating shows how an executive compares with industry peers in pay and company profitability. The rating is based on an index that provides equal weight to the company's overall ROE as well as its improvement or decline during the past three years. Both these measurements are divided by an executive's total pay and then compared with others in the same industry grouping.

Footnotes: † Indicates executive retired in 1991-92 ‡ Includes some long-term compensation e = estimated NA = not available NM = not meaningful

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
1 AEROSPACE (INDUSTRIAL: HIGH TECH)											
BOEING	29314.0	F. A. Shrontz, chmn. & CEO	1188	9	0	4395	187	[2]	16.7	70.4	[2]
	19.4	D. D. Thornton, exec. v-p	710	12	1309	4194		[3]			[2]
GENERAL DYNAMICS	8751.0	W. A. Anders, chmn. & CEO	1500	-22	2950	NA	112	NA	-3.2	-4.2	NA
	18.9	J. R. Mellor, pres. & COO	1200	75	2397	4874		[4]			[4]
Shares of restricted stock granted: chmn., 44,910; pres., 30,000.											
LOCKHEED	9809.0	D. M. Tellep, chmn. & CEO	1225	21	90	3212	122	[3]	9.0	-31.1	[3]
	12.3	V. N. Marafino, vice-chmn., CFO & CAO	938	4	85	2771		[3]			[3]
MARTIN MARIETTA	6075.4	N. R. Augustine, chmn. & CEO	1262	12	3021e	6714	157	[4]	20.4	-34.8	[3]
	17.4	A. T. Young, pres. & COO	789	13	1161e	3433		[3]			[3]
MCDONNELL DOUGLAS	18432.0	J. F. McDonnell, chmn. & CEO	851	47	0	2597	107	[2]	5.3	-16.6	[3]
	9.2	G. A. Johnston, pres. & COO	741	97	0	1504		[2]			[3]
UNITED TECHNOLOGIES	21262.5	R. F. Daniell, chmn. & CEO	1166	-15	0	5178	145	[3]	-1.1	NM	[5]
	-33.5	A. E. Wegner, exec. v-p	716	-8	0	2302		[3]			[5]
Shares of restricted stock granted: chmn., 17,000.											
2 AIRLINES (TRANSPORTATION)											
AMR	12887.2	R. L. Crandall, chmn., pres. & CEO	600	0	787e	4717	131	[2]	1.5	NM	[3]
	-6.1	D. J. Carty, exec. v-p & CFO	431	18	261e	2172		[2]			[3]
DELTA AIR LINES	10019.6	R. W. Allen, chmn. & CEO	485	-34	563	3586	140	[2]	5.6	NM	[3]
	-14.1	W. W. Hawkins, pres. & COO	278	-20	844	2327		[3]			[3]
JAL	11662.6	S. M. Wolf, chmn., pres. & CEO	575	-50	2235	22261	133	[5]	1.9	NM	[2]
	-20.8	J. C. Pope, vice-chmn., CFO & treas.	515	-21	316	12777		[5]			[2]
3 APPLIANCES (CONSUMER PRODUCTS)											
MAYTAG	2970.6	D. J. Krumm, chmn. & CEO†	983	6	0	3555	92	[3]	10.5	-71.1	[4]
	7.8	L. A. Hadley, pres. & COO†	515	7	0	1641		[3]			[5]
Shares of restricted stock granted: chmn., 79,602; pres., 29,850.											
WHIRLPOOL	6770.0	D. R. Whitwam, chmn., pres. & CEO	1590	60	0	3617	170	[2]	9.8	-8.1	[3]
	11.2	W. D. Marohn, exec. v-p	546	28	98	1465		[2]			[3]
Shares of restricted stock granted: chmn., 100,000; exec. v-p, 50,000.											
4 AUTOMOTIVE (CONSUMER PRODUCTS)											
CHRYSLER	28162.0	L. A. Iacocca, chmn.	976	6	2356e	11965	57	[5]	-1.2	NM	[5]
	-8.8	R. A. Lutz, pres.	646	15	72e	2584		[5]			[5]
EATON	3381.0	J. R. Stover, chmn. & CEO†	694	-34	1016	5319	127	[3]	12.8	-72.6	[4]
	5.4	W. E. Butler, chmn. & CEO	469	-30	100	2278		[3]			[4]
FORD MOTOR	88286.3	H. A. Pasing, chmn. & CEO†	1141	-7	0	5680	71	[4]	3.5	NM	[5]
	-10.0	P. E. Benton, Jr., pres. & COO†	752	-5	0	4032		[5]			[5]
GENERAL MOTORS	122081.3	R. C. Stempel, chmn. & CEO	1000	15	326e	5658	87	[4]	-4.5	NM	[5]
	-18.7	L. E. Reuss, pres.-N. Amer. Ops.	725	11	249e	4089		[5]			[5]
PACCAR	2338.9	C. M. Pigott, chmn. & CEO	630	-31	0	3881	130	[3]	11.4	-80.2	[4]
	3.8	J. M. Dunn, pres.†	630	1	0	2525		[3]			[4]
5 BANKS & BANK HOLDING COMPANIES (FINANCIAL SERVICES)											
BANC ONE	4154.1	J. B. McCoy, chmn.	1783	43	99	4449	276	[2]	14.8	-13.3	[3]
	14.5	R. H. Potts, chmn.-sub.	739	22	0	1933		[1]			[2]
Shares of restricted stock granted: chmn., 10,300.											
BANK OF NEW YORK	4224.6	J. C. Bacot, chmn. & CEO-Co. & Bank	810	-7	68	3016	99	[3]	5.1	-57.5	[4]
	3.6	P. Herrick, pres.; vice-chmn.-Bank	510	-15	41	1947		[3]			[4]
Unvested performance shares & restricted stock granted: chmn., 22,000; pres., 13,000.											
BANKAMERICA	12268.0	R. M. Rosenberg, chmn. & CEO	1600	0	2350	6800	219	[3]	15.2	11.5	[3]
	15.8	L. W. Coleman, vice-chmn.	1000	3	0	2842		[2]			[2]
Shares of restricted stock granted: chmn., 25,000.											
BANKERS TRUST NEW YORK	6844.0	C. S. Sanford Jr., chmn.-Corp. & Bank	1850	23	1748e	7654	203	[4]	0.2	17.4	[4]
	21.7	E. B. Shanks Jr., exec. v-p	1650	38	579e	4798		[3]			[4]
Shares of restricted stock granted: chmn., 35,000; exec. v-p, 25,000.											
BARNETT BANKS	3274.0	C. E. Rice, chmn. & CEO†	980	6	0	2858	110	[3]	8.6	-58.3	[4]
	6.5	A. L. Lastinger Jr., pres. & COO†	523	9	0	1503		[2]			[4]
CHASE MANHATTAN	11839.0	T. G. Labrecque, chmn. & CEO	1180	73	0	3441	80	[4]	-6.3	-59.0	[5]
	9.8	A. F. Ryan, pres. & COO	949	68	0	2435		[4]			[5]
CHEMICAL BANKING	14128.0	J. F. McGillicuddy, chmn. & CEO	2050	NA	0	NA	88	NA	-4.2	-98.4	NA
	0.4	W. V. Shipley, pres. & COO	1716	132	563e	4568		[4]			[5]
CITICORP	31839.0	J. S. Reed, chmn. & CEO	1219	1	126	4854	56	[5]	-2.8	NM	[5]
	-15.1	R. S. Braddock, pres. & COO	848	3	97	3183		[4]			[5]
CORESTATES FINANCIAL	2472.9	T. A. Larsen, chmn., pres. & CEO	911	14	262e	3034	132	[2]	13.1	-2.9	[2]
	15.3	G. A. Butler, pres.†	745	13	0e	NA		NA			NA

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
FIFTH THIRD BANCORP	885.4 15.7	G. A. Schaefer Jr., pres. & CEO-Co. & Bank C. L. Buenger, chmn.-Co. & Bank	616 466	20 -39	78e 1308e	1727 3632	236	[1] [3]	15.5	-5.1	[1] [3]
FIRST BANK SYSTEM	1821.3 14.5	J. F. Grundhofer, chmn., pres. & CEO R. A. Zona, vice-chmn. & CFO	1280* 450	-30 26	0 0	NA NA	128 NA	NA NA	7.6	NA	NA NA
*Includes \$271,000 paid under employment agreement for benefits forfeited from previous employer.											
FIRST CHICAGO	4829.8 3.3	B. F. Sullivan, chmn.-Corp. & Bank† D. J. Vitale, exec. v-p-Corp. & Bank	770 570	5 122	0 0	2967 NA	103 NA	[3] NA	9.0	-86.8	[5] NA
Shares of restricted stock granted: chmn., 26,542; exec. v-p, 8,725.											
FIRST FIDELITY BANCORPORATION	2777.6 11.9	A. P. Terracciano, chmn., pres. & CEO* W. Schoellkopf, vice-chmn. & CFO*	904 581	9 18	758 0	NA NA	137 NA	NA NA	6.9	914.3	NA NA
*Executives joined company 2/1/90 & 3/6/90 (respectively).											
FIRST INTERSTATE BANCORP	5119.7 -16.0	W. S. Randall, CEO-Southwest Region† E. M. Carson, chmn. & CEO†	684 665	6 -27	54 145	1948 2683	87	[2] [4]	-3.4	NM	[5] [5]
FIRST UNION	4321.2 9.6	E. E. Crutchfield Jr., chmn. & CEO J. R. Georgius, pres.; chmn. & CEO-sub.	650 450	8 29	87e 53e	2379 1449	150	[2] [2]	10.9	-37.9	[3] [3]
FLEET/NORSTAR FINANCIAL GROUP	4438.9 3.8	T. Murray, chmn., pres. & CEO M. R. Zucchini, exec. v-p	1402 626	85 NA	0 0	3978 NA	111 NA	[3] NA	5.5	-77.6	[5] NA
Shares of restricted stock granted: chmn., 50,000; exec. v-p, 25,000											
KEYCORP	2282.7 14.1	V. J. Riley Jr., chmn., pres. & CEO W. H. Dougherty, group exec. v-p & CFO	1187 572	18 16	6 202	3298 1708	244	[1] [1]	13.9	7.1	[2] [1]
MBNA	1134.2 25.2	C. M. Cawley, pres.; chmn. & CEO-Bank A. Lerner, chmn. & CEO	1531* 871	NA NA	20 0	NA NA	NA NA	NA NA	NA	NA	NA NA
Includes 1/91 compensation from MNC. Shares restricted stock granted: pres., 20,000. *Includes \$717,000 for forfeited MNC compensation.											
MELLON BANK	3151.0 14.0	F. V. Cahouet, chmn., pres. & CEO W. K. Smith, vice-chmn.	1177 523	2 3	1558 531	7006 2762	156	[4] [3]	11.4	NA	[1] [1]
J. P. MORGAN	10314.0 19.6	D. Weatherstone, chmn.-Co. & bank D. A. Warner III, pres.-Co. & bank	2043 1692	30 28	2071e 168e	7879 4527	213	[4] [3]	1.1	9.4	[4] [4]
NATIONAL CITY	2587.9 12.7	E. B. Brandon, chmn. & CEO W. R. Robertson, deputy chmn.	755 493	-15 -10	160 84	3128 1895	129	[2] [2]	14.9	-28.0	[2] [2]
Shares of restricted stock granted: chmn., 32,500; deputy chmn., 5,100.											
NATIONSBANK	11594.0 2.8	H. L. McColl Jr., pres. & CEO J. W. Thompson, chmn.-NationsBank East	2000 1000	186 122	1353 508	7317 3669	164	[4] [3]	9.6	-78.2	[4] [4]
NORWEST	4420.3 17.0	L. P. Johnson, chmn. & CEO R. M. Kovacevich, pres. & COO	1647 1232	18 13	1439 2789	8988 9304	243	[4] [4]	13.8	-5.6	[3] [4]
Shares of restricted stock granted: chmn., 14,000; pres., 10,000.											
PNC FINANCIAL	4469.6 11.7	T. H. O'Brien, chmn. & CEO J. E. Rohr, pres.; chmn. & CEO-sub.	1294 549	75 74	0 0	3584 1212	133	[3] [2]	9.1	-33.3	[4] [3]
REPUBLIC NEW YORK	2535.3 13.3	J. C. Keil, pres.; vice-chmn. - Bank† W. H. Weiner, chmn. - Corp. & Bank†	1133 1020	3 7	0 0	2682 2581	173	[2] [2]	8.8	-1.1	[2] [3]
Shares of restricted stock granted: chmn., 2,703											
STATE STREET BOSTON	1357.9 17.1	W. S. Edgerly, chmn. D. A. Spina, vice-chmn., treas. & CFO	1140 629	20 16	0 0	9084 6693	250	[4] [3]	17.1	-6.6	[3] [3]
SUNTRUST BANKS	3360.6 14.6	J. B. Williams, chmn. & CEO R. Strickland, chmn.-exec. comm.	602 556	37 29	444 399	2533 2587	214	[1] [2]	15.3	-11.3	[1] [2]
Shares of restricted stock granted: chmn., 160,000											
U. S. BANCORP	2014.0 13.9	R. L. Breezley, chmn. & CEO E. P. Jensen, pres. & COO	623 387	5 9	0 595	2522 2474	227	[1] [2]	14.5	6.0	[1] [2]
WACHOVIA	3138.3 9.2	J. G. Medlin Jr., chmn., pres. & CEO† J. G. Lindley, vice-chmn.†	683 518	-30 NA	966e 949e	3498 NA	200	[2] NA	13.4	-41.1	[3] NA
WELLS FARGO	5861.0 0.1	C. E. Reichardt, chmn. P. Hazen, pres.	775 575	-47 -47	0 0	3919 5184	114	[3] [4]	15.5	-99.7	[5] [5]
6 BEVERAGES (CONSUMER PRODUCTS)											
ANHEUSER-BUSCH	10996.3 21.2	A. A. Busch III, chmn., pres. & CEO J. E. Ritter, exec. v-p, CFO & CAO	1879 974	8 8	4776 1877	17254 8149	204	[4] [4]	22.9	-8.2	[4] [4]
COCA-COLA	11571.6 36.5	R. C. Goizueta, chmn. & CEO D. R. Keough, pres. & COO	3142 2185	0 4	944 585	21222 15364	371	[4] [4]	36.5	7.2	[3] [4]
Shares of restricted stock granted: chmn., 1,000,000											
COCA-COLA ENTERPRISES	4050.8 -6.4	B. G. Dyson, pres. & CEO*† L. R. Cowart, exec. v-p & CFO*†	787 402	-21 -21	4130** 1342**	6758 2694	104	[4] [4]	1.0	NM	[5] [5]
*Resigned 12/18/91. **Includes estimated value of restricted stock vested plus cash awards from special severance program.											
PEPSICO	19607.9 19.5	D. W. Calloway, chmn. & CEO M. H. Jordan, chmn.-Intl. Food & Bev. Div.	1912 970	1 -1	0 4337	5317 7182	266	[2] [4]	21.6	-19.2	[3] [4]
7 BUILDING MATERIALS (INDUSTRIAL: LOW TECH)											
PPG INDUSTRIES	5672.6 7.6	V. A. Sarni, chmn. & CEO E. B. Mosier, group v-p*	1044e 437e	-33 -26	701 186	6099 2196	137	[3] [3]	15.5	-63.6	[4] [3]
*Left company 1/92.											
SHERWIN-WILLIAMS	2541.4 14.8	J. G. Breen, chmn. & CEO T. A. Commes, pres. & COO	1078 651	0 2	417 0	4581 2021	220	[2] [2]	15.7	-12.1	[2] [2]
8 CHEMICALS (INDUSTRIAL: LOW TECH)											
AIR PRODUCTS & CHEMICALS	2967.0 13.0	D. F. Baker, chmn. & CEO H. A. Wagner, pres. & COO	1161 494	6 9	0 186	4958 1670	189	[3] [2]	14.0	-22.7	[3] [2]

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
AMERICAN AMID	4986.2 13.8	G. J. Sella Jr., chmn. & CEO A. J. Costello, pres.	1309 671	6 24	1164 400	6888 3250	147	[4] [3]	10.2	-7.0	[3] [3]
AMERICAN AMICAL	2837.0 11.1	A. R. Hirsig, pres. & CEO† D. W. Wood, sr. v-p†	615 440	11 -13	0 0	1759 1623	161	[1] [2]	18.0	-69.1	[4] [4]
AMERICAN AMORITIES	665.6 26.4	J. F. McCaughan, chmn. & CEO W. R. Cook, pres. & COO: chmn.-subs.	688 445	21 23	375e 624e	2318 1751	263	[1] [1]	27.0	25.8	[1] [1]
AMERICAN AMERICAN CHEMICAL	18807.0 9.9	F. P. Popoff, pres. & CEO K. R. McKennon, exec. v-p-technology	1069 722	15 10	256 206	5154 5434	105	[4] [5]	19.0	-70.2	[4] [4]
AMERICAN AMONT	38695.0 8.4	E. S. Woolard Jr., chmn. & CEO E. P. Blanchard Jr., vice-chmn.†	1356 984	-10 -9	21 0	5743 3140	175	[3] [3]	12.8	-40.6	[3] [3]
AMERICAN AMYL	2574.9 16.9	F. D. Gottwald Jr., chmn. & CEO B. C. Gottwald, pres. & COO	968 920	3 3	30 30	2942 2994	144	[2] [3]	21.2	-17.2	[1] [2]
AMERICAN AMERICAN PORT- AMERICAN	1579.2 25.3	J. R. Moffett, chmn. & CEO M. H. Ward, pres. & COO	1162 849	-42 -45	3116 2067	21665 14832	171	[5] [5]	52.8	-29.7	[3] [3]
AMERICAN AMERICAN LAKES AMICAL	1307.6 18.8	E. Kampen, chmn., pres. & CEO R. B. McDonald, sr. v-p	1010 274	12 39	771 577	3784 2029	397	[1] [1]	19.5	-12.1	[2] [1]
AMERICAN AMULES	2928.9 4.9	T. L. Gossage, chmn. & CEO F. L. Buckner, pres. & COO† Shares of restricted stock granted: chmn., 36,900; pres., 13,640.	994 720	116 45	0 0	1839 1606	128	[2] [2]	1.6	-16.0	[4] [4]
AMERICAN AMIZOL	1476.3 15.6	L. E. Coleman, chmn. & CEO† W. G. Bares, pres. & COO†	880 610	-5 -6	442 30	3353 1772	171	[2] [2]	18.5	-21.2	[2] [2]
AMERICAN AMERICAN ROCHEMICAL	5729.0 182.0	B. G. Gower, pres. & CEO W. E. Haynes, sr. v-p	915 330	4 10	958 239	3564 1159	NA NA	NA NA	NM	-20.2	[1] [1]
AMERICAN AMISANTO	8864.0 8.1	R. J. Mahoney, chmn. & CEO E. H. Harbison Jr., pres. & COO	1530 1061	25 24	789 1175	5583 4663	180	[3] [4]	12.9	-47.9	[3] [4]
AMERICAN AMERICAN CHEMICAL	1237.3 23.6	W. H. Clark, chmn. & CEO† E. J. Mooney, pres. & COO†	863 504	-16 -7	483 0	4717 1886	249	[2] [1]	25.2	6.2	[2] [1]
AMERICAN AM & HAAS	2763.0 12.8	J. L. Wilson, chmn. & CEO† J. P. Mulrone, pres. & COO† Shares of restricted stock granted: chmn., 4,733; pres., 2,670.	771 603	2 -5	0 0	2259 1912	137	[2] [3]	14.8	-33.1	[2] [2]
AMERICAN AMERICAN CARBIDE	4877.0 -6.0	R. D. Kennedy, chmn. & CEO H. W. Lichtenberger, pres. & COO	808 518	-43 -43	0 0	3633 2344	91	[3] [4]	10.3	NM	[5] [5]
CONGLOMERATES (INDUSTRIAL: LOW TECH)											
AMERICAN ED-SIGNAL	11831.0 -9.2	E. L. Hennessy Jr., chmn.† L. A. Bossidy, chmn. & CEO *Excludes \$10.3 million in retirement benefits; includes \$6.6 million per employment agreement. **Includes \$375,000 for forfeited awards.	4113* 1184**	144 NA	4300* 0	13940 NA	151	[5] NA	6.7	NM	[4] NA
AMERICAN ERAL ELECTRIC	59379.0 20.5	J. F. Welch Jr., chmn. & CEO E. E. Hood Jr., vice-chmn. & exec. off.	3207 1790	8 11	1894 2182	13698 9776	184	[4] [5]	19.7	11.5	[3] [3]
AMERICAN SEHOLD ERNATIONAL	4593.9 7.9	D. C. Clark, chmn. & CEO E. P. Hoffman, pres. & COO	1081e 780	-27 -23	0 0	4838 3391	102	[4] [4]	13.8	-46.1	[3] [3]
AMERICAN ERNATIONAL	20421.0 9.3	R. V. Araskog, chmn., pres. & CEO M. C. Woodward Jr., vice-chmn. & CFO	2800 1125	-27 -5	1080 1036e	20887 6187	124	[5] [4]	11.7	-13.6	[4] [3]
AMERICAN ERNATIONAL	669.4 15.8	D. B. Pall, founder chmn. A. Krasnoff, chmn.	753 753	58 58	0 206	1678 1966	225	[1] [2]	15.4	-11.6	[1] [2]
AMERICAN KWEEL ERNATIONAL	11549.9 13.8	D. R. Beall, chmn. & CEO K. M. Black, exec. v-p & COO	1517 792	2 5	1390e 685e	8228 3692	137	[4] [4]	15.7	-37.4	[3] [3]
AMERICAN NECO	13662.0 -25.0	J. L. Ketelsen, chmn. & CEO K. W. Reese, vice-chmn.* *Passed away 11/23/91. Shares of restricted stock granted: chmn., 12,775; v-chmn., 8,195.	1470 772	-22 -28	21 9	5121 3050	83	[4] [4]	2.8	NA	[5] [5]
AMERICAN IRON	7822.5 10.3	B. F. Dolan, chmn. & CEO† J. F. Hardyman, pres. & COO† Shares of restricted stock granted: chmn., 25,950.	2860 1547	10 5	175 18	7951 7609	180	[3] [4]	10.5	-10.4	[3] [4]
AMERICAN IRON	7913.0 -8.4	J. T. Gorman, chmn. & CEO E. D. Dunford, pres. & COO Shares of restricted stock granted: chmn., 30,000; pres., 20,000.	1099 696	7 20	141 221e	3545 2342	114	[3] [3]	5.8	NM	[5] [4]
CONTAINERS & PACKAGING (INDUSTRIAL: LOW TECH)											
AMERICAN IE CONTAINER	5384.3 -3.2	R. W. Stone, chmn., pres. & CEO M. Rosenkrantz, exec. v-p	804 401	-32 -33	1206 110	4748 1817	88	[4] [3]	8.2	NM	[4] [5]
AMERICAN PLE-INLAND	2507.2 9.0	C. J. Grum, chmn. & CEO B. J. Lancashire, exec. v-p	700 437	-12 -6	3279 362	6478 2266	226	[3] [2]	13.9	-50.3	[3] [3]
DRUGS (CONSUMER PRODUCTS)											
AMERICAN DRATORIES	6876.6 34.0	D. L. Burnham, chmn. & CEO T. R. Hodgson, pres. & COO	1340 955	15 18	2867 623	8349 4807	296	[3] [3]	33.2	11.4	[2] [2]
AMERICAN A CORP	139.7 -19.2	M. S. Gerstel, co-chmn., CEO & CFO J. E. Shaw, pres. & COO	446 339	25 28	0 0	1253 951	439	[1] [1]	0.7	NM	[5] [5]
AMERICAN RICAN HOME DUCTS	7079.4 41.7	J. R. Stafford, chmn. & CEO B. Canavan, pres.	1840 1140	8 17	3790 0	11015 4154	219	[4] [3]	47.9	33.0	[2] [1]
AMERICAN IEN	682.0 18.4	G. M. Binder, chmn. & CEO D. Vapnek, sr. v-p-research *Reflects transitional period 4/1/91 - 12/31/91 due to fiscal year change	263* 158*	NA NA	0 552	1943 3316	1347	[1] [1]	12.4	NA	[1] [2]

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
BAUSCH & LOMB	1520.1 10.5	D. E. Gill, chmn. & CEO† T. C. McDermott, pres. & COO†	1777 1018	33 28	3595e 2012e	10568 5911	276	3 3	14.1	-32.6	4 4
BAXTER INTERNATIONAL	8921.0 14.1	V. R. Loucks Jr., chmn. & CEO W. H. Ganitz, pres.	1786 1204	2 16	2521e 1671e	9038 5964	238	3 4	8.4	34.1	4 4
BECTON, DICKINSON	2190.9 13.3	R. V. Gilmartin, pres. & CEO C. Castellini, sector pres.-medical	757 352	4 8	180 61	2696 1138	138	2 1	14.4	-14.5	2 2
BIOMET	244.2 22.6	D. A. Miller, pres. & CEO J. M. Norris, v-p; pres.-EBI	308 304	47 43	0 215	712 1042	761	1 1	22.9	2.8	1 1
BRISTOL-MYERS SQUIBB	11159.0 35.5	R. L. Gelb, chmn. & CEO W. A. Davidson, exec. v-p	2051 1106	-2 0	10607 819	20809 5595	210	5 4	27.5	51.8	3 2
GENENTECH	459.6 4.7	G. K. Raab, pres. & CEO R. A. Swanson, chmn.	876 797	30 14	0 0	10525 6895	202	4 4	1.0	-9.4	4 4
IMCERA GROUP	1663.5 9.9	G. D. Kennedy, chmn. & CEO M. B. Ingle, pres. & COO	1325 867	15 61	3849 3064	9104 5461	347	3 3	9.2	13.8	4 4
JOHNSON & JOHNSON	12447.0 26.0	R. S. Larsen, chmn. & CEO† R. E. Campbell, vice-chmn.†	1253 1108	16 15	1168e 1184e	6122 6115	278	2 3	25.1	-6.6	3 3
ELI LILLY	5725.7 26.5	R. D. Wood, chmn. V. D. Bryson, pres. & CEO	2218 1045	25 14	3857 1720	15576 8418	207	4 4	28.0	12.2	3 3
MARION MERRELL DOW	2851.0 39.2	J. G. Temple Jr., chmn. & CEO† F. W. Lyons Jr., pres.†	1590 1314	9 12	0 0	NA NA	190	NA NA	40.4	-0.3	NA NA
MEDTRONIC	1124.5 19.8	W. R. Wallin, chmn. W. W. George, pres. & CEO	872 534	10 8	4262 150e	7575 NA	490	2 NA	19.8	-4.0	3 NA
MERCK	8602.7 43.2	P. R. Vagelos, chmn., pres. & CEO† F. H. Spiegel Jr., sr. v-p†	3344 1331	60 57	0 0	17250 NA	299	4 NA	44.0	2.1	3 NA
PFIZER	6950.0 14.4	E. T. Pratt Jr., chmn. emeritus W. C. Steere Jr., chmn. & CEO	1764 1113	12 55	164 843	7617 3553	302	2 2	15.0	-21.9	3 3
RHONE-POULENC RORER	3824.3 36.9	R. E. Cawthorn, chmn. & CEO R. H. Thurman, ofc. of pres. & exec. v-p	1275 680	21 42	91e 1278e	8224 3778	310	3 2	19.4	168.3	2 2
SCHERING-PLOUGH	3615.6 48.0	R. P. Luciano, chmn. & CEO† R. J. Kogan, pres. & COO†	1900 1220	12 13	1417e 959e	12247 7847	243	4 4	33.1	106.3	2 2
SIGMA-ALDRICH	589.4 18.1	C. T. Cori, chmn., pres. & CEO D. R. Harvey, exec. v-p & COO	475 346	0 5	815e 563e	3628 2473	227	2 2	19.6	-21.9	2 3
ST. JUDE MEDICAL	209.8 24.4	L. A. Lehmkuhl, pres. & CEO E. W. Siverton, pres.-Int'l. Div.	574 330	27 25	7053 0	8457 1227	553	2 1	25.7	-5.6	3 1
STRYKER	364.8 18.4	J. W. Brown, chmn., pres. & CEO R. A. Elenbaas, v-p	500 334	14 36	0 0	1330 1021	741	1 1	17.2	5.5	1 1
SYNTEX	1957.5 38.5	P. E. Freiman, chmn. & CEO J. H. Fried, vice-chmn.	1008 718	24 12	0 859	2521 3567	249	1 3	44.8	-2.2	1 1
U. S. SURGICAL	843.6 27.6	L. C. Hirsch, chmn., pres. & CEO T. Josefson, exec. v-p-marketing	1351 749	20 19	21930 2288e	37691 29433	1380	3 3	22.1	54.6	4 4
UPJOHN	3426.3 30.3	T. Cooper, chmn. & CEO W. U. Parfet, pres.†	1332 564	-1 46	659e 52e	6388 1307	153	3 1	25.9	56.1	2 1
WARNER- LAMBERT	5059.0 12.0	M. R. Goodes, chmn. & CEO L. J. R. de Vink, pres. & COO	1287 797	24 37	2175 263	7014 2263	210	3 2	27.7	-64.7	3 3
12 ELECTRICAL, ELECTRONICS (INDUSTRIAL: HIGH TECH)											
AMP	3095.0 13.6	H. A. McInnes, chmn. & CEO J. E. Marley, pres. & COO	618 488	7 3	0 163	1764 1705	141	1 2	15.6	-35.3	2 2
COOPER INDUSTRIES	6162.6 10.2	R. Cizik, chmn., pres. & CEO A. E. Riedel, sr. v-p-admin.	1124 587	-16 -17	5175e 2427e	11618 5654	224	4 3	10.1	-19.6	4 3
EMERSON ELECTRIC	7443.4 18.8	C. F. Knight, chmn. & CEO A. E. Suter, pres. & COO	1804 814	2 25	0 0	7508 NA	193	4 NA	19.5	0.5	2 NA
INTEL	4778.6 18.5	A. S. Grove, pres. & CEO G. E. Moore, chmn.	1115 820	30 16	0 0	2650 2149	206	1 2	17.3	-14.9	1 2
LITTON INDUSTRIES	5463.5 5.4	O. L. Hoch, chmn. & CEO J. T. Casey, vice-chmn. & CFO	1406 899	5 5	0 0	3933 4899	122	3 4	11.0	-62.2	3 3
MOLEX	739.8 10.2	F. A. Krehbiel, vice-chmn. & CEO G. Tokuyama, v-p; pres.-sub.	487 478	-6 10	0 0	1527 1487	185	1 1	12.2	-32.8	2 2
MOTOROLA	11341.0 9.8	G. Fisher, chmn. & CEO G. L. Tooker, pres. & COO	1118 868	20 14	0 0	2844 4145	161	2 3	11.5	-25.6	2 3
TEXAS INSTRUMENTS	6784.0 -27.9	J. R. Junkins, chmn., pres. & CEO W. P. Weber, exec. v-p	604 348	1 0	5 18	2035 1236	80	2 2	-6.4	NM	5 5
WESTINGHOUSE ELECTRIC	12794.0 -29.0	P. E. Lego, chmn. & CEO T. Stern, sr. exec. v-p	667 360	-60 -56	0 0	5323 2334	83	4 4	-0.4	NM	4 5
13 FOOD PROCESSING (CONSUMER PRODUCTS)											
ARCHER DANIELS MIDLAND	8800.9 11.7	D. O. Andreas, chmn. & CEO J. R. Randall, pres.	2000 1025	3 12	0 0	5412 3020	278	2 2	13.1	-13.2	3 3
BORDEN	7235.1 14.9	R. J. Ventres, chmn. & CEO†† A. S. D'Amato, pres. & CEO†	1514 975	-6 17	0 0	4623 2440	120	3 3	10.3	-11.5	3 3

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
MPBELL SOUP	6132.5 23.5	D. W. Johnson, pres. & CEO† H. M. Baum, exec. v-p; pres. N. A. Div.† Shares of restricted stock granted: pres., 50,925; exec. v-p, 16,200.	1444 804	2 47	0 167	NA 2424	279	NA [2]	8.1	83.9	NA [2]
NAGRA	20650.2 15.8	C. M. Harper, chmn. & CEO P. B. Fletcher, pres. & COO *Includes \$1.5 million for 92/93 incentive (award subject to continued employment and achievement of objectives).	4002* 865	147 33	4749 1785e	16583 6081	285	[4] [3]	17.6	-24.1	[4] [4]
INTERNATIONAL	6189.1 27.5	C. R. Shoemate, chmn., pres. & CEO R. W. Siebrasse, vice-chmn.†	921 625	21 -6	375e 1203e	3257 4107	186	[2] [3]	29.6	13.8	[1] [2]
ERAL MILLS	7485.9 38.0	H. B. Atwater Jr., chmn. & CEO F. C. Blodgett, vice-chmn., CFO & CAO	1431 1069	0 0	5037e 1066e	10651 4535	298	[3] [3]	41.9	-11.8	[3] [2]
I. HEINZ	6553.2 28.5	A. J. F. O'Reilly, chmn., pres. & CEO J. J. Bogdanovich, vice-chmn.	1361 682	11 29	73724 872	81107 4040	178	[5] [4]	26.7	15.1	[4] [2]
RSHEY FOODS	2899.2 16.4	R. A. Zimmerman, chmn. & CEO K. L. Wolfe, pres. & COO	815 652	6 5	563 374	3811 2761	181	[2] [3]	16.4	14.4	[2] [2]
RMEI	2763.5 14.0	R. L. Knowlton, chmn., pres. & CEO D. J. Hodapp, group v-p-Admin. Shares of restricted stock granted: chmn., 2,100.	1661 560	4 39	2338 895	8537 2242	201	[4] [2]	14.6	-2.7	[3] [2]
LOGG	5786.6 28.1	W. E. LaMothe, chmn. & CEO† A. G. Langbo, pres. & COO	1852 901	18 39	7531e 1633	15212 3773	213	[4] [3]	26.8	-13.4	[3] [3]
CORMICK	1427.9 20.8	C. P. McCormick Jr., chmn. & CEO B. A. Thomas, pres. & COO	1036 763	4 5	1079e 703e	4491 3315	387	[1] [2]	18.3	72.0	[2] [2]
NEER HI-BRED ERNATIONAL	1131.2 16.8	T. N. Urban, chmn. & pres. C. S. Johnson, sr. v-p *Includes 1990 & 1991 bonuses due to change in reporting.	883* 584*	34 31	77e 46e	2079 1378	230	[1] [1]	13.7	57.1	[1] [1]
AKER OATS	5569.5 33.7	W. D. Smithburg, chmn., pres. & CEO P. A. Marineau, exec. v-p	1405 669	30 29	2223e 104e	9857 NA	149	[4] NA	25.9	64.9	[3] NA
STON PURINA	7448.2 41.3	W. P. Stiritz, chmn., pres. & CEO J. W. Brown, v-p; chmn. & CEO-sub.	1198 432	3 7	12615 523	20792 3478	145	[5] [4]	NM	NM	NM NM
IA LEE	12650.6 23.7	J. H. Bryan, chmn. & CEO P. Fulton, pres.	1751 1079	25 19	0 940	6561 5561	289	[2] [3]	23.7	18.0	[2] [3]
CO	8468.6 16.1	J. F. Woodhouse, chmn. & CEO B. M. Lindig, pres. & COO	1067 910	-5 -5	174 136	3824 3500	246	[2] [2]	16.7	9.3	[2] [3]
ON FOODS	3977.6 17.4	D. Tyson, chmn. L. Tollett, pres. & CEO	1806 887	-41 -66	0 0	8434 4606	234	[3] [3]	19.3	-27.1	[3] [3]
I. WRIGLEY JR.	1148.9 27.8	W. Wrigley, pres. & CEO R. D. Ewers, exec. v-p Shares of restricted stock granted: pres., 1,901; exec. v-p, 566.	729 503	0 5	293 234	2678 1852	236	[1] [1]	29.3	-1.8	[1] [1]
FOOD & LODGING (SERVICE)											
TON HOTELS	1113.0 8.8	B. Hilton, chmn., pres. & CEO J. V. Giovenco, exec. v-p-gaming ops.	996 662	-5 -7	0 0	3013 1907	82	[3] [3]	11.2	-45.0	[3] [3]
GENERAL & SPECIAL MACHINERY (INDUSTRIAL: LOW TECH)											
ERPILLAR	10182.0 -10.0	D. V. Fites, chmn. & CEO J. W. Wogland, vice-chmn. & exec. v-p	523 380	-3 -3	0 0	2014 1178	75	[3] [3]	1.9	NM	[5] [5]
RE	7069.3 0.1	H. W. Becherer, chmn. & CEO D. H. Stowe Jr., pres. & COO Shares of restricted stock granted: chmn., 5,790; pres., 3,607.	654 451	-36 -31	163 119	2999 2436	111	[3] [3]	9.2	-99.1	[4] [4]
VER	2195.8 15.5	G. L. Roubos, chmn. & pres. J. B. Apple, v-p; pres-sub.	765 540	-1 -10	195 41	3211 2922	152	[2] [3]	18.2	-21.3	[2] [2]
	3899.4 55.9	R. H. Malott, chmn. & CEO† R. N. Burt, chmn., pres. & CEO	1238 620	3 27	3771 89	8769 2074	150	[4] [3]	NA	NA	NA NA
ERSOLL-RAND	3586.2 9.2	T. H. Black, chmn., pres. & CEO C. H. Folley, vice-chmn. & CFO	1120 727	-6 -7	279 899	4802 4884	172	[3] [4]	11.7	-26.2	[3] [3]
NLEY WORKS	1962.2 13.5	R. H. Ayers, chmn., pres. & CEO D. M. Hadlow, group v-p	679 369	-11 -9	0 0	2510 1305	155	[2] [1]	15.4	-9.1	[1] [1]
O ORATORIES	3076.6 9.9	J. F. Fort, chmn. & CEO L. D. Kozlowski, pres. & COO	1170 920	0 -10	3150 1470	13126 6917	99	[5] [5]	NA	-47.0	NA NA
INSTRUMENTS (INDUSTRIAL: HIGH TECH)											
KEYWELL	6192.9 17.9	J. J. Renier, chmn. & CEO C. J. Steffen, exec. v-p, CFO & CAO	1276 792	-13 0	867 951e	6307 3160	232	[3] [2]	22.8	NA	[1] [1]
LEISURE TIME INDUSTRIES (CONSUMER PRODUCTS)											
CKBUSTER ERTAINMENT	868.0 19.4	H. W. Huizenga, chmn. & CEO S. R. Berrard, vice-chmn. & CFO	400 381	0 33	0 5215	NA 6079	242	NA [4]	20.8	27.2	NA [3]
NIVAL ISE LINES	1404.7 21.7	A. K. Lanterman, pres. & CEO-sub. M. Arison, chmn., pres. & CEO	763 670	5 -3	834e 0	3850 2013	180	[2] [2]	21.1	-17.0	[2] [2]
T DISNEY	6626.6 16.5	M. D. Eisner, chmn. & CEO F. G. Wells, pres. & COO	5442 2746	-52 -51	0 0	26264 59333	177	[5] [5]	21.1	-25.6	[4] [4]
TMAN KODAK	19419.0 0.3	K. R. Whitmore, chmn., pres. & CEO L. J. Thomas, group v-p	1146 760	21 8	49 31	3212 NA	120	[3] NA	6.2	-98.6	[5] NA

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
HASBRO	2141.1 8.5	A. G. Hassenfeld, chmn., pres. & CEO A. J. Verrecchia, COO-Domestic Toy Ops.	1411 715	23 38	2741 911	6295 2571	263	[2] [2]	10.0	-14.1	[4] [3]
MATTEL	1621.7 26.9	J. W. Amerman, chmn. & CEO J. E. Barad, pres.-Mattel USA	1364 712	18 22	886 1662	6641 4196	439	[2] [2]	30.7	-1.9	[2] [2]
PARAMOUNT COMMUNICATIONS	4068.9 3.8	M. S. Davis, chmn. & CEO D. Oresman, exec. v-p & CAO	2750 890	-25 -9	2306e 1381e	22951 8847	101	[5] [5]	3.6	-77.6	[4] [4]
18 METALS & MINING (RESOURCES)											
ALUMINUM CO. OF AMERICA	9884.1 1.2	P. H. O'Neill, chmn. & CEO R. R. Hoffman, grp. v-p	562 321	-32 -17	0 222	2694 1521	128	[2] [1]	8.4	-93.4	[5] [5]
NEWMONT GOLD	572.8 17.1	T. P. Philip, pres. & COO G. R. Parker, chmn. & CEO	480 406	1 12	0 0	1803 1115	116	[1] [1]	21.6	-42.2	[1] [1]
NEWMONT MINING	622.8 46.8	G. R. Parker, chmn. & CEO R. B. Leather, vice-chmn.†	1021* 648	0 0	0 0	3864 2180	127	[2] [2]	NA	NA	NA NA
*Compensation for serving as an executive officer of Newmont Gold.											
PHELPS DODGE	2434.3 14.7	D. C. Yearley, chmn., pres. & CEO L. R. Judd, pres. & COO*	1068 783	5 1	1483 3697	7674 7659	162	[4] [5]	20.5	-48.0	[3] [3]
*Resigned 11/6/91. Shares of restricted stock granted: chmn., 3,500.											
REYNOLDS METALS	5730.1 5.2	W. O. Bourke, chmn. & CEO R. G. Holder, pres. & COO	1090 725	-24 -23	0 0	5380 2826	112	[4] [3]	11.7	-78.0	[4] [4]
19 MISCELLANEOUS MANUFACTURING (INDUSTRIAL: LOW TECH)											
CORNING	3286.8 15.3	J. R. Houghton, chmn. & CEO R. G. Ackerman, pres.	982 785	7 54	691 1204	4974 3100	231	[2] [2]	15.3	-18.4	[3] [3]
Shares of restricted stock granted: chmn., 24,010; pres. 15,000.											
DURACELL INTERNATIONAL	1589.4 11.6	C. R. Kidder, pres. & CEO P. P. Schatz, v-p	707 494	NA NA	0 0	NA NA	NA NA	NA NA	-10.7	NA	NA NA
HILLENBRAND INDUSTRIES	1198.9 18.2	W. A. Hillenbrand, pres. & CEO L. M. Smith, sr. exec. v-p	967 753	24 24	410e 343e	3285 2638	236	[1] [2]	18.0	-7.9	[2] [2]
ILLINOIS TOOL WORKS	2639.7 14.9	J. D. Nichols, chmn. & CEO H. R. Crowther, vice-chmn.	952 413	13 8	3627 175	11261 2514	189	[4] [2]	16.8	-20.8	[3] [2]
MINNESOTA MINING & MFG.	13340.0 18.3	A. F. Jacobson, chmn. & CEO† L. D. DeSimone, chmn. & CEO	1301 685	2 4	1216 654	7491 4189	168	[3] [4]	21.0	-12.4	[2] [3]
Shares of restricted stock granted: retired chmn., 5,008; chmn., 3,210.											
NEWELL	1118.9 18.4	D. C. Ferguson, vice-chmn. & CEO W. P. Sovey, pres. & COO	1075 900	1 6	0 981	5009 4863	335	[2] [3]	19.1	-6.7	[2] [3]
PARKER HANNIFIN	2353.6 4.8	P. G. Schloemer, pres. & CEO P. S. Parker, chmn.	775 491	-21 -22	46 0	2820 1706	118	[3] [3]	9.6	-62.2	[4] [4]
RUBBERMAID	1667.3 18.4	W. W. Williams, chmn. & CEO W. R. Schmitt, pres. & COO	826 604	14 22	1065e 364e	4462 2322	311	[2] [1]	18.8	-5.4	[2] [2]
20 NATURAL RESOURCES (RESOURCES)											
AMERADA HESS	6266.8 2.7	R. F. Wright, pres. & COO J. B. Hess, sr. exec. v-p	1025 735	0 4	160 0	2885 1855	157	[1] [2]	12.3	-52.0	[1] [2]
AMOCO	25325.0 8.3	H. L. Fuller, chmn., pres. & CEO R. M. Morrow, chmn. & CEO†	1302 1132	14 -33	236 1174	5841 7959	147	[3] [5]	11.2	-46.4	[3] [3]
ASHLAND OIL	9201.3 12.7	J. R. Hall, chmn. & CEO C. J. Luellen, pres. & COO	1038 804	-6 -1	0 0	4370 3102	98	[4] [4]	11.5	-22.6	[2] [2]
ATLANTIC RICHFIELD	17037.0 10.3	L. M. Cook, chmn. & CEO R. E. Wycoff, pres. & COO	1674 1136	-26 -26	2009e 171	10705 4535	151	[5] [4]	21.2	-59.1	[3] [2]
BURLINGTON RESOURCES	1753.9 6.8	T. H. O'Leary, chmn., pres. & CEO D. W. Clayton, pres. & CEO-Meridian Oil	1170 700	0 0	0 0	3390 2000	114	[2] [3]	6.1	194.5	[2] [1]
Shares of restricted stock granted: chmn., 50,000; pres.-sub., 25,000.											
CHEVRON	36461.0 8.8	K. T. Derr, chmn. J. D. Bonney, vice-chmn.	1386 848	2 5	352e 155e	4431 2730	170	[2] [2]	8.4	-26.6	[3] [2]
COASTAL	9548.8 4.7	O. S. Wyatt Jr., chmn. J. R. Paul, pres. & CEO; chmn.-sub.	1120 814	-3 -6	0 913	3478 5009	113	[3] [4]	8.7	-59.8	[3] [3]
ENRON	13519.5 12.8	K. L. Lay, chmn. & CEO R. D. Kinder, pres. & COO	1754 1153	14 12	2467 1718	8613 4920	212	[3] [3]	12.2	90.4	[2] [2]
Shares of restricted stock granted: chmn., 25,940; pres., 16,540											
EXXON	102847.0 16.2	L. G. Rawl, chmn. & CEO L. R. Raymond, pres.	1813 1264	17 16	7453 2368	12202 6001	155	[5] [4]	13.9	-1.9	[3] [2]
KERR-McGEE	3274.0 6.7	F. A. McPherson, chmn. & CEO J. W. McKenny, pres. & COO	542 437	-32 -33	0 0	3247 2826	113	[2] [3]	7.6	-6.2	[2] [2]
Shares of restricted stock granted: chmn., 12,300; pres., 8,975.											
MOBIL	56042.0 11.1	A. E. Murray, chmn., pres. & CEO P. J. Hoenmans, exec. v-p-Mobil Oil	2040 937	9 8	2625 1652	13327 7021	168	[5] [4]	11.4	-14.2	[3] [3]
OCCIDENTAL PETROLEUM	10096.0 8.7	R. R. Irani, chmn., pres. & CEO D. A. Hentschel, exec. v-p	2691 847	12 6	148e 104e	7330 2603	94	[5] [3]	-9.6	74.8	[4] [4]
PENNZOIL	2684.7 -3.6	J. L. Pate, pres. & CEO J. W. Shaddix, gen. couns.	650 237	-2 -3	0 78	2079 NA	91	[2] NA	7.0	NA	[1] NA

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP.		LONG- TERM COMP.	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
			SALARY & BONUS \$000	% CHANGE FROM 1990		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
HILLIPS PETROLEUM	12604.0 3.6	C. J. Silas, chmn. & CEO G. A. Cox, pres. & COO† Shares of restricted stock granted: chmn., 39,552; pres., 25,252.	825 610	-36 -31	1317 0	4514 2413	139	[3] [2]	11.2	-88.2	[4] [4]
IN	10184.0 -4.9	R. McClements Jr., chmn.† R. H. Campbell, pres. & CEO *Includes \$1,600,000 lump sum severance payment.	2631* 454	171 -7	0 6	5896 1408	112	[4] [2]	1.4	NM	[4] [4]
XACO	37271.0 13.8	J. W. Kinnear, pres. & CEO A. C. DeCrane Jr., chmn. Shares of restricted stock granted: pres., 13,985; chmn., 6,906.	1667 1305	-14 -13	1566 1031	10518 8597	152	[4] [5]	19.8	-19.5	[2] [3]
LOCAL	9685.0 3.0	R. J. Stegemeier, chmn., pres. & CEO† C. S. Brinegar, vice-chmn. & exec. v-p† Shares of restricted stock issued in lieu of cash under incentive plan: chmn., 6,066.	913 714	-23 -2	0 0	4168 2868	134	[3] [3]	11.4	166.8	[1] [2]
X-MARATHON GROUP	13975.0 -2.4	C. A. Corry, chmn.-USX Corp. V. G. Beghini, vice-chmn.-Co. & USX Corp. Includes compensation for positions held at USX Corp. and USX-U. S. Steel Group.	1313 935	-18 -8	829e 419e	5082 NA	98	[4] NA	7.6	NM	[3] NA
NONBANK FINANCIAL (FINANCIAL SERVICES)											
TNA LIFE CASUALTY	19195.6 6.8	J. T. Lynn, chmn. R. E. Compton, pres.	1087 779	2 6	0 0	4237 3187	111	[4] [4]	8.2	-32.4	[3] [3]
LAC	3282.7 16.1	P. S. Amos, chmn.-Co. & AFLAC D. P. Amos, pres. & CEO-Co. & AFLAC	1205 1109	38 40	774 1556	3619 4540	224	[2] [3]	14.1	-5.1	[2] [3]
F. ANIMANSON	4592.1 9.0	R. H. Deihl, chmn. & CEO C. R. Rinehart, pres. & COO	1287 784	-1 13	115 98	5659 2089	122	[5] [3]	9.0	-15.9	[3] [3]
AMERICAN EXPRESS	25763.0 10.5	H. L. Clark Jr., chmn. & CEO-sub. J. D. Robinson III, chmn. & CEO	2055 1625	NA -10	677e 0	NA 8538	87	NA [5]	12.2	-48.5	NA [4]
AMERICAN GENERAL	4395.0 11.1	H. S. Hook, chmn. & CEO M. J. Poulos, vice-chmn.	1766 1187	32 34	2164e 1358e	6772 4447	171	[4] [3]	11.5	15.6	[3] [3]
AMERICAN INTL. GROUP	15833.9 13.5	M. R. Greenberg, chmn. & CEO E. E. Mathews, vice-chmn.-fin.	1950 490	11 5	0 0	5270 1395	184	[3] [1]	14.7	-19.0	[3] [1]
AM	2892.7 13.7	P. G. Ryan, chmn., pres. & CEO D. T. Cox, exec. v-p Shares of restricted stock granted: chmn., 25,000; exec. v-p, 10,000.	893 538	-2 NA	0 0	2593 NA	157	[2] NA	15.5	-16.2	[2] NA
AMERICAN STEARNS	2526.6 23.1	A. C. Greenberg, chmn. & CEO J. E. Coyne, pres. Compensation for 1989 reflects a 14-month period due to fiscal year change.	5299 4597	26 26	0 0	14040 12133	205	[5] [5]	17.9	NA	NA NA
ARKSHIRE THAWAY	3106.0 6.0	M. A. Goldberg, v-p J. V. McKenzie, v-p, CFO & secy.	1839 260	-3 3	0 0	5982 748	193	[3] [1]	7.5	-35.1	[4] [2]
AR DICK	1297.0 27.7	H. W. Bloch, chmn. & CEO T. M. Bloch, pres. & COO	790 422	-5 1	1283 0	3608 1114	279	[1] [1]	25.6	23.3	[1] [1]
PITAL HOLDING	2670.7 14.5	I. W. Bailey II, chmn., pres. & CEO† S. J. Mehta, pres.-Banking Grp.†	1339 758	17 17	0 0	5551 NA	204	[3] NA	15.0	-8.1	[3] NA
UBB	4578.9 15.6	D. R. O'Hare, chmn. & CEO R. D. Smith, pres.	1239 810	8 8	925e 903e	4801 3423	279	[2] [2]	16.6	-5.7	[2] [2]
ANA	18750.0 7.7	W. H. Taylor, chmn., pres. & CEO† J. G. Stewart, exec. v-p & CFO†	1342 793	5 4	273e 63e	4182 2374	149	[3] [3]	7.3	5.3	[3] [3]
AMERICAN NATL. FINANCIAL	1161.1 10.1	R. B. Morgan, pres. & CEO W. H. Zimmer, vice-chmn.	717 409	14 31	56 117	2510 1647	NA NA	NA NA	NA	NA	NA NA
AMERICAN FINANCIAL	11131.4 12.2	E. J. Noha, chmn. & CEO D. H. Chookaszian, pres. & COO	1741 585	-17 28	0 70	5339 1610	162	[3] [2]	11.8	5.7	[3] [2]
AMERICAN INDIAN	13585.7 26.2	J. A. Johnson, chmn. & CEO R. E. Birk, pres. & COO†	1080 840	63 10	942e 2492	NA 8687	421	NA [3]	27.7	17.0	NA [3]
EDDIE C	4219.0 22.6	L. C. Brendsel, chmn. & CEO† D. W. Glenn, pres. & COO†	1041 750	96 74	447e 263e	2387 1804	NA NA	NA NA	21.6	6.1	[1] [1]
AMERICAN INKLIN SOURCES	333.9 26.9	C. B. Johnson, pres. & CEO R. H. Johnson Jr., exec. v-p	524 440	9 10	0 0	1456 1199	385	[1] [1]	31.4	-39.0	[1] [1]
AMERICAN GENERAL RE	3206.6 17.2	R. E. Ferguson, chmn., pres. & CEO† J. C. Etling, vice-chmn.†	1257 1009	0 -3	521e 332	5112 3846	192	[3] [3]	18.6	-9.9	[2] [2]
AMERICAN WEST FINANCIAL	2241.5 16.5	H. M. Sandler, chmn. & CEO M. O. Sandler, pres. & CEO	775 774	7 7	0 0	3474 4200	281	[1] [2]	15.5	6.7	[2] [3]
EAT WESTERN FINANCIAL	3952.7 13.3	J. F. Montgomery, chmn. & CEO J. F. Maher, pres. & COO	1719 1095	27 18	0 0	4369 2893	137	[3] [3]	8.2	6.0	[3] [3]
PERSON-PILOT	1173.5 11.2	W. R. Soles, chmn. & pres.* W. E. Blackwell, exec. v-p; pres.-sub.* *Includes value of 100,000 & 4,000 shares (respectively) which have been rescinded under 3/31/92 court order.	1579 341	12 NA	2156 177e	8040 NA	203	[4] NA	10.7	54.0	[3] NA
AMERICAN PER	3131.1 11.1	D. B. Mathis, pres. & COO C. M. Kierscht, chmn., pres. & CEO-sub.	892 695	61 NA	156 6	2311 NA	170	[2] NA	8.4	-2.2	[2] NA
AMERICAN WS	13261.3 16.0	P. R. Tisch, pres. & co-CEO J. S. Tisch, exec. v-p	1324 480	6 31	0 0	3564 NA	143	[2] NA	16.9	-27.8	[2] NA
AMERICAN RSH & McLENNAN	2779.2 29.5	L. J. Lasser, pres. & CEO-sub.† F. J. Tasco, chmn. & CEO† Shares of restricted stock granted: pres., (sub.), 500e; chmn., 5,300.	2019 1590	57 2	991 0	5993 5718	158	[4] [4]	30.4	-24.8	[2] [2]
AMERICAN IA	269.0 13.6	W. O. Bailey, chmn. & CEO D. H. Elliot, pres. & COO	1000 765	29 30	875 205	3370 2105	252	[1] [2]	13.5	4.2	[2] [2]

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
MERRILL LYNCH	12362.8 17.8	W. A. Schreyer, chmn. & CEO D. P. Tully, pres. & COO	4500 3825	190 191	7030e 5696e	16812 13904	259	[5] [4]	5.1	39.1	[4] [4]
MORGAN STANLEY GROUP	6785.1 19.7	R. B. Fisher, chmn. R. F. Greenhill, pres.	5300 5300	147 147	1662e 1662e	15698 15698	238	[5] [5]	19.2	-30.7	[4] [4]
PRIMERICA	6608.2 14.6	F. G. Zarb, vice-chmn. S. I. Weill, chmn. & CEO Shares of restricted stock granted: vice-chmn., 26,882; chmn., 26,041.	2286 2234	44 21	860 13672	6327 19289	186	[3] [5]	12.9	75.6	[3] [4]
SAFECO	3182.9 11.7	B. Maines, chmn. & CEO† R. H. Eigsti, pres. & COO	649 369	13 12	1068 258	3008 1552	221	[1] [1]	14.0	-21.9	[2] [2]
SALOMON	9175.0 13.7	A. J. Hall, exec. v-p J. L. Massey, exec. v-p Shares of restricted stock granted: Hall, 557,835; Massey, 50,374. Unvested shares awarded: Massey, 21,116	1576 1288	NA -32	0 4681	NA 10598	135	NA [5]	12.1	74.7	NA [3]
ST. PAUL	4368.7 16.7	D. W. Leatherdale, chmn., pres. & CEO R. W. Pettitt, exec. v-p Shares of restricted stock granted: chmn., 674.	954 720	0 NA	239 0	3295 NA	184	[2] NA	17.5	-3.9	[1] NA
SALLIEMAE	3257.4 35.7	L. A. Hough, pres. & CEO A. L. Lord, exec. v-p & COO	778 609	27 17	895 737	3972 3359	224	[2] [3]	32.9	-2.9	[1] [1]
TORCHMARK	1932.0 22.3	R. K. Richey, chmn. & CEO J. W. Rotenstreich, pres.* *Resigned 6/91. ** Includes \$625,000 & \$425,000 (respectively) paid by subsidiary.	2104** 1148**	16 4	0 3839	18944 12260	203	[5] [5]	22.9	1.5	[3] [3]
TRANSAMERICA	6815.3 3.1	F. C. Herringer, pres. & CEO† J. R. Harvey, chmn.†	1100 1005	-29 -1	164e 346e	3719 5719	135	[3] [4]	7.9	-75.6	[4] [4]
TRAVELERS	11418.0 6.5	E. H. Budd, chmn. & CEO R. H. Booth, pres. & COO Shares of restricted stock granted: chmn., 41,301; pres., 5,000e	869 628	34 38	0 0	2719 NA	80	[3] NA	3.6	-29.2	[4] NA

22 OFFICE EQUIPMENT & COMPUTERS (INDUSTRIAL: HIGH TECH)

APPLE COMPUTER	6495.9 16.9	J. Sculley, chmn., CEO & CTO M. H. Spindler, pres. & COO	1338 879	-39 -19	0 0	20319 3671	143	[5] [3]	26.8	-57.6	[4] [3]
AUTOMATIC DATA PROCESSING	1810.8 20.7	J. S. Weston, chmn. & CEO A. F. Weinbach, sr. v-p-admin. & fin.	879 473	13 20	291e 186e	4563 2492	240	[2] [2]	19.8	19.5	[2] [1]
CISCO SYSTEMS	244.0 33.9	J. P. Morgridge, pres. & CEO J. T. Chambers, sr. v-p *Incl. 100K relocation bonus.	275 244*	53 NA	0 0	599 NA	NA NA	NA NA	47.3	NA	NA NA
COMPAQ COMPUTER	3271.4 6.8	J. R. Canion, pres. & CEO E. Pfeiffer, pres. & CEO *Served until 10/24/91; Includes \$3,600,000 payable over 16 months under termination of employment agreement.	4337* 1814	86 36	1196 0	9975 5287	88	[5] [5]	19.9	-78.4	[4] [4]
DELUXE	1474.5 24.4	H. V. Haverty, pres. & CEO J. K. Twogood, exec. v-p	797 546	11 18	278 153	2388 1552	172	[2] [1]	24.7	-3.2	[1] [1]
DIGITAL EQUIPMENT	14237.8 -11.6	K. H. Olsen, pres. J. F. Smith, sr. v-p	995 609	1 10	0 0	2927 1857	56	[4] [4]	0.9	NM	[5] [4]
HEWLETT-PACKARD	14949.0 11.3	J. A. Young, vice-chmn., pres. & CEO D. O. Morton, exec. v-p & COO	1434 856	5 -1	1492 637	9725 5207	109	[5] [4]	12.7	-37.3	[3] [3]
IBM	64792.0 -1.5	J. F. Akers, chmn. J. D. Kuehler, pres. Shares of restricted stock granted: chmn., 5,468; pres., 3,281.	925 535	-54 -59	1692e 1621e	7178 5008	85	[4] [5]	7.4	NM	[4] [4]
MICROSOFT	2275.9 32.8	M. R. Hallman, pres. & COO M. J. Maples, sr. v-p-sub.	604 404	-48 40	0 4248	NA 6346	627	NA [1]	31.2	-0.5	NA [2]
NOVELL	710.4 27.5	J. C. Bills, exec. v-p; gen. mgr.-Netware K. S. Rekhi, exec. v-p; gen. mgr.-Interop.	272 268	6 16	0 2762	1102 3436	800	[1] [1]	23.9	22.4	[1] [1]
ORACLE SYSTEMS	1085.2 9.0	L. J. Ellison, chmn., pres. & CEO G. W. Squire, exec. v-p	900 432	-44 -56	0 0	4234 8546	149	[3] [5]	11.9	-74.7	[4] [4]
PITNEY BOWES	3332.5 16.0	G. B. Harvey, chmn., pres. & CEO M. C. Breslawsky, pres.-sub. Shares of restricted stock granted: chmn., 26,600; pres.-sub., 10,400.	1166 704	51 17	0 317	4983 2237	156	[3] [2]	13.9	-14.5	[3] [2]
SUN MICROSYSTEMS	3454.7 15.0	S. G. McNealy, chmn., pres. & CEO K. C. Melia, v-p & CFO	1572 681	12 NA	0 0	3760 NA	171	[2] NA	12.1	-16.3	[3] NA
TANDY	4514.7 9.4	J. V. Roach, chmn., pres. & CEO B. S. Appel, pres.-sub.	723 443	-17 -20	0 0	2567 1593	75	[3] [3]	14.8	-52.4	[3] [2]
XEROX	16745.0 8.3	P. A. Allaire, chmn. & CEO S. B. Ross, exec. v-p	1083 699	-9 -2	507 299	4076 NA	133	[3] NA	11.9	25.6	[2] NA

23 OIL SERVICE & SUPPLY (RESOURCES)

BAKER HUGHES	2747.0 10.4	J. D. Woods, chmn., pres. & CEO M. L. Lukens, sr. v-p & pres.-sub.	916 509	-27 3	391e 0	4364 1391	147	[2] [1]	9.2	89.7	[2] [1]
DRESSER INDUSTRIES	4606.8 7.6	J. J. Murphy, chmn., pres. & CEO B. D. St. John, exec. v-p-admin.	1071 589	-3 -4	0 70	4982 2108	148	[3] [2]	9.2	-6.6	[2] [2]
HALLIBURTON	6975.5 1.2	T. H. Cruikshank, chmn. & CEO D. P. Jones, pres.	1200 720	9 27	295e 96e	4338 1972	113	[3] [3]	5.4	-69.4	[3] [3]
SCHLUMBERGER	6145.2 21.2	D. E. Baird, chmn. & CEO R. Génin, vice-chmn.	1300 870	-13 -13	0 761	3940 3793	202	[1] [3]	17.7	28.5	[1] [1]

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS						
			TOTAL ANNUAL COMP.		LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT			
			SALARY & BONUS \$000	% CHANGE FROM 1990		TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING	
4 PAPER & FOREST PRODUCTS (RESOURCES)												
ORGIA-PACIFIC	11524.0	T. M. Hahn Jr., chmn. & CEO	1500	0	704	5404	158	3	11.2	NM	4	
	-2.9	H. L. Airington, vice-chmn.†	800	0	6467e*	10697		5			4	
*Includes estimated value of 74,000 shares vested in connection with retirement and amounts paid for related taxes.												
TERNATIONAL PER	12703.0	J. A. Georges, chmn. & CEO	1357	-6	1789e	6574	163	3	11.2	-56.8	3	
	7.0	J. T. Dillon, exec. v-p	577	-2	367e	2563		2			3	
MBERLY-CLARK	6776.9	D. E. Smith, chmn. & CEO†	1428	4	0	7105	188	3	19.9	-0.6	2	
	20.2	W. R. Sanders, pres., CEO & COO	820	17	208	2417		2			1	
UISIANA-PACIFIC	1702.1	H. A. Merlo, chmn.	750	15	587	10138	168	4	9.6	-60.9	4	
	4.6	J. C. Hart, v-p-fin. & treas.	375	15	249	2205		2			3	
EAD	4579.3	B. R. Roberts, chmn. & CEO	560	2	112	2284	96	2	8.3	-78.8	5	
	5.1	S. C. Mason, vice-chmn.	414	1	224	1793		3			5	
DTY PAPER	4976.5	P. E. Lippincott, chmn. & CEO	600	-1	122	3462	95	3	7.2	NM	5	
	-3.5	J. R. Leaman Jr., vice-chmn.; pres.-sub.	521	18	401	3005		4			5	
Shares of restricted stock granted: vice-chmn., 20,000.												
ION CAMP	2967.1	R. E. Cartledge, chmn. & CEO†	759	-5	252e	2797	158	1	11.8	-66.0	3	
	6.4	W. C. McClelland, pres. & COO†	558	-8	35e	1724		1			3	
Shares of restricted stock granted: chmn., 2,352; pres., 1,639.												
STVACO	2267.7	J. A. Luke, pres. & CEO	948	-4	287	3160	147	2	11.7	-43.3	2	
	8.6	D. L. Luke III, chmn.	813	-4	1571	4084		3			3	
YERHAEUSER	8701.6	J. W. Creighton Jr., pres. & CEO	537	-17	0	1879	124	1	4.9	NM	5	
	-2.9	G. H. Weyerhaeuser, chmn.†	515	-53	528	3638		4			4	
LLAMETTE DUSTRIES	2004.5	W. Swindells, chmn. & CEO	580	5	0	1650	146	1	13.0	-78.7	4	
	4.6	S. R. Rogel, pres. & COO	358	26	0	884		1			4	
Shares of restricted stock granted: chmn., 2,433; pres., 1,608.												
PERSONAL CARE PRODUCTS (CONSUMER PRODUCTS)												
ON PRODUCTS	3593.3	J. E. Preston, chmn., pres. & CEO	1193	0	2231	10516	269	3	58.1	64.2	2	
	76.5	E. J. Robinson, exec. v-p & CFO	560	-1	0	3485		2			1	
Shares of restricted stock granted: chmn., 75,000; exec. v-p, 35,000.												
ROX	1678.7	C. R. Weaver, chmn. & CEO†	870	8	240	4021	150	3	15.0	-59.3	3	
	7.6	R. A. Bolingbroke, pres. & COO†	453	32	77	1482		2			3	
GATE- LMOLIVE	6060.3	R. Mark, chmn., pres. & CEO	1748	12	0	8769	219	3	25.9	-46.1	3	
	7.2	W. S. Shanahan, COO	950	24	0	3520		3			3	
LETTE	4683.9	A. M. Zeien, chmn. & CEO	1112	42	2724e	7867	347	2	NM	NA	NA	
	38.7	L. R. Waxlax, exec. v-p	661	15	1008e	3138		2			NA	
L. FLAVORS & AGRANCES	1017.0	E. P. Grisanti, chmn. & pres.	788	11	196	2701	221	1	17.7	-5.1	2	
	17.6	H. C. van Baaren, sr. v-p	482	8	0	1434		1			2	
DCTER & GAMBLE	28229.0	E. L. Artzt, chmn. & CEO	1684	17	372	5801	228	3	24.0	59.6	2	
	25.4	J. E. Pepper, pres.	1326	6	0	5197		4			3	
Shares of restricted stock granted: chmn., 6,423; pres., 4,465.												
ABRANDS	660.7	M. F. C. Emmett, chmn., pres. & CEO	503	-32	1163e	2827	237	1	25.1	46.8	1	
	35.5	C. J. Chapman, exec. v-p	303	-23	0	NA		NA			NA	
PUBLISHING, RADIO & TV BROADCAST (SERVICE)												
ITAL CITIES/ABC	5382.0	D. B. Burke, pres., CEO & COO	961	-7	2839	11460	120	5	13.1	-19.9	4	
	10.3	T. S. Murphy, chmn.	834	-18	2839	11379		5			4	
	3035.0	L. A. Tisch, chmn., pres. & CEO	1383	2	0	4059	89	4	-5.4	NM	5	
	-31.4	P. A. Lund, exec. v-p-sub.	903*	-43	0	NA		NA			NA	
*Includes \$253,000 for loss of bonus from previous employer.												
N JONES	1725.1	P. R. Kann, chmn. & CEO	730	36	0	2146	95	2	11.7	-74.4	4	
	5.0	K. L. Burenga, pres. & COO	510	28	0	1482		2			4	
I & BRADSTREET	4642.8	C. W. Moritz, chmn. & CEO	1629	11	516	6705	119	4	24.9	-1.3	2	
	23.5	R. E. Weissman, pres. & COO	1113	9	344	4391		4			2	
Shares of restricted stock granted: chmn., 6,378; pres., 4,131.												
IMETT	3382.0	J. J. Curley, chmn., pres. & CEO	1300	0	779	5677	138	4	19.3	-4.0	3	
	19.6	D. H. McCorkindale, vice-chmn., CFO	1100	5	148	4100		4			2	
GHT-RIDDER	2237.3	J. K. Batten, chmn. & CEO	605	-5	629	3429	125	3	15.9	-35.6	3	
	11.5	P. A. Ridder, pres.-Co. & Newspaper Div.	454	-1	341	1803		2			2	
RAW-HILL	1943.0	J. L. Dionne, chmn. & CEO	834	-19	821e	4437	102	4	12.5	-26.3	3	
	14.8	H. W. McGraw III, exec. v-p-operations	431	-16	235e	NA		NA			NA	
V YORK TIMES	1703.1	A. O. Sulzberger, chmn. & CEO†	966	109	142	2537	94	3	5.6	-76.3	5	
	4.4	W. E. Mattson, pres. & COO†	763	101	347	2634		3			5	
DER'S DIGEST	2465.2	G. V. Grune, chmn. & CEO	1319	11	2805e	13549	NA	NA	31.5	NA	NA	
	30.0	M. J. Bohane, pres.-sub. & v-p†	492	6	660	2910		NA			NA	
I. SCRIPPS	1299.6	L. A. Leser, pres. & CEO	809	-5	59	3780	148	3	10.3	-14.1	3	
	9.6	G. R. Champagne, sr. v-p-cable	419	8	42	1877		2			2	
Shares of restricted stock granted: pres., 8,683; sr. v-p, 4,668.												
E- MUNICATIONS	3827.0	J. C. Malone, pres.	454	0	18480*	19792	130	5	-27.2	NM	5	
	-7.1	B. Magness, chmn.	454	0	17280	18590		5			5	
*Excludes value of 400,000 shares sold by pres. to company on 6/10/91												
ES MIRROR	3614.1	R. F. Erburu, chmn. & CEO	909	3	604e	4402	104	4	9.9	-77.9	4	
	4.4	D. Lavenhol, pres.	619	6	418e	3014		3			5	

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE: %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN			PAY VS. CORPORATE PROFIT		
						TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	ROE %	CHANGE IN ROE %	RATING
TRIBUNE	2034.7 24.7	C. T. Brumback, pres. & CEO S. R. Cook, chmn.	869 781	1 -30	1785 3673	5160 8529	113	[4] [5]	12.3	39.7	[2] [3]
WASHINGTON POST	1380.3 12.8	H. E. Wall, pres.-Cable Div. K. Graham, chmn.	441 423	4 -24	0 74	1690 2506	97	[2] [3]	17.7	-58.6	[3] [4]

27 RAILROADS (TRANSPORTATION)

BURLINGTON NORTHERN	4559.0 -25.5	G. Grinstein, chmn. & CEO W. E. Greenwood, COO-sub. Shares of restricted stock granted: chmn., 15,000; COO, 7,500.	1180 580	-8 -12	277 36	4462 1801	56	[4] [4]	4.9	NM	[5] [5]
CONSOLIDATED RAIL	3252.0 -9.3	J. A. Hagen, chmn., pres. & CEO C. N. Marshall, sr. v-p-development	1007 408	26 18	0 269	2112 1240	264	[1] [1]	1.1	NM	[4] [4]
CSX	8636.0 -2.4	J. W. Snow, chmn., pres. & CEO R. L. Kirk, chmn.-sub.	1235 569	28 NA	1759e 124e	5667 NA	195	[2] NA	6.8	NA	[1] NA
NORFOLK SOUTHERN	4451.3 0.7	A. B. McKinnon, chmn. & CEO† J. R. Turbyfill, exec. v-p-fin.†	1735 790	6 3	1254e 369e	7801 3232	204	[3] [2]	7.9	-94.1	[2] [2]
SANTA FE PACIFIC	2360.0 9.3	R. D. Krebs, chmn., pres. & CEO D. E. Springer, sr. v-p, treas. & CFO Shares of restricted stock granted in lieu of 1991 bonus: chmn., 17,750.	766 370	39 NA	294 220	3667 NA	83	[3] NA	-8.2	-69.4	[4] NA
UNION PACIFIC	7029.0 1.5	D. Lewis, chmn., pres. & CEO W. L. Adams, chmn.-sub. Shares of restricted stock granted: chmn., 56,000; chmn.-sub., 8,000.	2025 1002	6 9	2131 1446	9286 4937	172	[4] [3]	10.4	-87.5	[2] [1]

28 RETAILING (FOOD) (SERVICE)

ALBERTSON'S	8680.5 21.5	G. G. Michael, chmn. & CEO J. B. Carley, pres. & COO	701 639	1 -8	1710 1878	6479 6300	214	[3] [4]	21.4	5.8	[3] [3]
WINN-DIXIE STORES	10203.0 20.3	A. D. Davis, chmn. J. Kufeldt, pres.	646 644	8 8	337 337	2110 2104	185	[2] [2]	18.7	26.3	[1] [1]

29 RETAILING (NONFOOD) (SERVICE)

AUTOZONE	868.3 21.8	J. R. Hyde III, chmn. & CEO P. R. Formanek, pres. & COO	959 721	33 33	0 0	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
COSTCO WHOLESALE	5614.0 12.9	J. D. Sinegal, pres., CEO & COO J. H. Brotman, chmn.	412 410	0 -1	0 0	1160 1152	702	[1] [1]	12.2	18.0	[1] [1]
HOME DEPOT	5136.7 15.6	B. Marcus, chmn. & CEO A. M. Blank, pres. & COO	1587 1379	0 0	0 0	4759 4120	722	[1] [1]	20.4	-22.3	[2] [3]
KMART	34969.0 15.5	J. E. Antonini, chmn., pres. & CEO G. R. Mrkoncic, exec. v-p-sub. Shares of restricted stock granted: chmn., 8,750; exec. v-p, 2,813.	1546 766	56 NA	0 0	3437 NA	150	[3] NA	12.0	-3.3	[3] NA
THE LIMITED	6149.2 23.7	L. H. Wexner, chmn. & pres. M. Trust, pres.-Mast	1818 1074	-1 4	0 0	5303 3056	216	[3] [2]	25.7	-8.4	[2] [2]
MEDCO CONTAINMENT SERVICES	1550.8 14.8	M. J. Wygod, chmn. & CEO J. V. Manning, sr. exec. v-p-fin. & CFO	459 356	-21 -35	33290 8029	39261 9437	592	[5] [3]	7.4	67.2	[4] [4]
MELVILLE	9886.2 19.1	S. P. Goldstein, chmn., pres. & CEO M. A. Friedheim, exec. v-p	1297 804	7 7	602 259	4574 2688	131	[3] [3]	24.7	-8.2	[2] [2]
NORDSTROM	3179.8 14.5	B. A. Nordstrom, co-chmn. J. N. Nordstrom, co-chmn.	465 465	55 55	125 0	1248 1874	122	[2] [2]	14.7	-25.0	[2] [2]
J. C. PENNEY	17295.0 13.3	W. R. Howell, chmn. & CEO R. B. Gill, vice-chmn.; COO-sub.	937 627	-6 -7	387 177	4582 3148	123	[3] [3]	16.3	-45.2	[3] [3]
PRICE	7056.2 16.8	R. E. Price, chmn. & CEO T. Wallace, exec. v-p	270 252	12 3	0 0	759 2264	138	[1] [3]	19.7	-15.1	[1] [2]
SEARS, ROEBUCK	57242.4 9.2	P. J. Purcell, chmn. & CEO-sub. A. J. Hill, chmn. & CEO-sub.	1915 1050	40 46	1317e 573e	6605 3994	107	[4] [5]	8.9	25.2	[3] [3]
WALGREEN	6901.3 18.0	C. R. Walgreen III, chmn. & CEO C. D. Hunter, vice-chmn. & CFO *Includes \$195,000 and \$88,000 (respectively) estimated payment under bonus plan.	1054* 582*	15 11	307 162	3529 1959	259	[2] [2]	18.4	-0.4	[2] [2]

30 SERVICE INDUSTRIES (SERVICE)

BROWNING-FERRIS	3182.8 3.9	W. D. Ruckelshaus, chmn. & CEO N. A. Myers, vice-chmn.	806 449	0 7	0 0	2965 1450	86	[3] [3]	15.7	-82.1	[4] [4]
CHEMICAL WASTE MANAGEMENT	1358.3 11.5	J. E. Dempsey, chmn., pres. & CEO T. E. Noel, sr. v-p-operations	345 261	-48 NA	0 0e	2181 NA	169	[2] NA	16.0	-45.4	[2] NA
R. R. DONNELLEY & SONS	3914.8 11.8	J. R. Walter, chmn. & CEO C. K. Doty, pres. Shares of restricted stock granted: chmn., 6,250; pres., 2,200.	644 381	-16 -2	73 52	2302 1496	153	[2] [2]	13.8	-25.2	[2] [2]
FEDERAL EXPRESS	7548.0 -1.8	F. W. Smith, chmn., pres. & CEO J. L. Barksdale, exec. v-p & COO	662 532	14 15	0 218	2122 2308	77	[3] [4]	1.9	NM	[5] [5]
FLIGHTSAFETY INTERNATIONAL	267.6 15.3	A. L. Uelisch, chmn. & pres. B. N. Whitman, exec. v-p Shares of restricted stock granted: exec. v-p, 1,105.	369 301	1 2	0 396	1034 1222	189	[1] [1]	17.6	-16.0	[1] [1]
FLUOR	6580.0 14.6	L. G. McCraw, chmn. & CEO† V. L. Kontny, pres. & COO† Shares of restricted stock granted: chmn., 13,730; pres., 9,530	1111 741	24 4	2191 1554	7048 5604	191	[3] [4]	15.3	56.3	[3] [3]

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP \$000	PAY VS TOTAL COMP \$000	SHAREHOLDER RETURN \$ VALUE OF \$100 INVESTED RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING	
NUINE PARTS											
	3434.6	L. L. Prince, chmn. & CEO	667	18	158	2006	149	2	19.7	-12.3	1
	18.4	T. C. Gallagher, pres. & COO	463	16	28	1286		2			1
W. GRAINGER											
	2077.2	D. W. Grainger, chmn.	744	3	174	2690	208	2	15.6	-13.3	2
	14.8	W. N. Caldwell, pres.	665	7	1025	3181		2			3
MANA											
	6099.0	D. A. Jones, chmn. & CEO	1366	20	5045	9911	173	4	18.4	-10.3	3
	17.6	C. F. Pollard, pres. & COO	892	43	0	5405		4			3
TIONAL MEDICAL ERPRISES											
	3972.7	R. K. Eamer, chmn. & CEO	1538	-18	15959	22203	168	5	17.1	-6.1	4
	16.4	L. Cohen, pres. & COO	1121	-20	7170	15078		5			4
EMIER DUSTRIAL											
	631.7	M. L. Mandel, chmn. & CEO	479	9	0	1328	163	2	26.0	-31.0	1
	22.7	W. M. Hamilton, pres.	274	8	69	984		1			1
DER SYSTEM											
	5061.1	M. A. Burns, chmn., pres. & CEO	764	-2	0	2284	85	3	4.3	-50.4	4
	4.3	R. G. Lambert, sr. exec. v-p-Aviation	511	12	0	1428		3			4
MEDICAL											
	168.5	T. E. Haire, chmn. & CEO	430	10	3180	5953	1050	1	17.7	-8.9	3
	22.2	J. C. Allegra, pres.	387	11	2702	NA		NA			NA
ITED HEALTHCARE											
	847.1	W. W. McGuire, chmn., pres., CEO & COO	1094	42	6723e	9292	1657	1	25.9	NA	5
	23.5	G. B. Borkow, exec. v-p & CFO	523	27	1919e	3199		1			5
SYE NAGEMENT											
	7550.9	D. L. Buntrock, chmn.	1100	-30	2647	17394	209	5	18.2	-30.9	4
	14.7	P. B. Rooney, pres.	800	-31	0	7219		4			4
STEEL (INDUSTRIAL: LOW TECH)											
COR											
	1465.5	F. K. Iverson, chmn. & CEO	368	-30	414	1635	190	1	10.3	-29.7	2
	9.4	S. Siegel, vice-chmn., treas. & CFO	277	-29	0	1052		1			2
TELECOMMUNICATIONS (TELECOMMUNICATIONS)											
TEL											
	1747.8	J. T. Ford, chmn., pres. & CEO†	677	-10	208	2540	178	1	17.8	11.1	1
	17.4	M. E. Bobbitt, exec. v-p & CFO†	476	-3	158	1798		1			1
IT											
	44651.0	R. E. Allen, chmn. & CEO	2061	2	856e	8336	149	4	14.6	NA	2
	3.2	R. L. Tobias, vice-chmn.	1129	4	423e	5403		4			2
Shares of restricted stock granted: chmn., 60,000.											
ERITECH											
	10818.4	W. L. Weiss, chmn. & CEO	1270	-2	902e	5573	153	3	15.6	-8.8	2
	14.4	R. L. Barnett, v-chmn.; pres.-sub.	722	-2	386e	2632		3			3
L ATLANTIC											
	12279.7	R. W. Smith, chmn. & CEO	1457*	13	289e	5647	154	3	14.7	18.5	2
	17.0	A. J. Campanella, pres.	880*	23	413e	3292		3			3
*Includes estimated value of shares awarded under incentive plan (receipt deferred until retirement or termination of employment)											
LSOUTH											
	14445.5	J. L. Clendenin, chmn., pres. & CEO	1356	-1	38e	4850	149	2	12.4	-18.3	3
	11.5	H. R. Holding, vice-chmn.-fin. & admin.	532	29	8e	1582		2			2
TEL											
	1180.5	J. P. Frazee Jr., chmn. & CEO	1529e	21	2092	6292	170	3	4.9	-19.2	4
	9.5	J. S. Vanderwoude, pres.	702e	21	232	2159		2			4
	19621.0	J. L. Johnson, chmn. & CEO	2168	24	711	6667	176	4	16.1	-5.1	3
	13.7	C. R. Lee, pres. & COO	1416	22	403	4308		4			3
AW CELLULAR MUNICATIONS											
	1365.6	J. H. Chapple, exec. v-p-operations	357	15	0	NA	110	NA	-10.2	NA	NA
	-20.1	T. A. Alberg, exec. v-p-legal & corp. affrs.	333	NA	0	NA		NA			NA
	8433.0	W. G. McGowan, chmn.	1594	10	2594	14299	135	5	19.3	-30.3	4
	17.6	B. C. Roberts Jr., pres., CEO & COO	1270	14	0	7325		5			4
EX											
	13228.8	W. C. Ferguson, chmn. & CEO	1215	16	342e	3982	143	2	8.4	-54.8	5
	6.3	R. J. Eckenrode, vice-chmn.	739	19	85e	2222		2			5
IFIC TELESIS											
	9895.0	S. Ginn, chmn., pres. & CEO	1114	16	727	5633	164	2	14.3	-10.6	3
	13.1	J. E. Hulse, vice-chmn. & CFO	671	9	404	3541		3			3
THERN NEW LAND TELECOMMS.											
	1632.8	W. H. Monteith Jr., chmn., pres. & CEO	440	-23	0	1627	136	1	12.7	-20.5	1
	10.7	R. F. Neal, sr. v-p	250	-20	0	888		1			1
THWESTERN											
	9331.9	E. E. Whitacre, Jr., chmn. & CEO	1380	0	1083e	6022	180	2	13.0	4.7	3
	13.1	R. G. Pope, vice-chmn. & CFO	916	-3	773e	4598		4			4
INT											
	8779.7	W. T. Esrey, chmn. & CEO†	1083	-5	1420	6334	115	4	15.1	96.1	2
	14.5	C. G. Fields, pres.-sub.†	472	-5	317	2618		3			2
VEST											
	10577.2	R. D. McCormick, pres. & CEO	660	-23	717e	5557	152	3	10.8	-60.3	4
	5.8	A. G. Ames, pres. & CEO-sub.	499	-8	291e	NA		NA			NA
TEXTILES, APPAREL (CONSUMER PRODUCTS)											
BORNE											
	2007.2	J. A. Chazen, chmn.	1185	-3	0	3211	249	2	26.8	1.6	1
	24.5	H. L. Falk, vice-chmn. & pres.	1185	-3	771	4286		3			3
	3211.8	P. H. Knight, chmn. & CEO	654	20	0	1452	556	1	28.1	-14.2	1
	25.5	R. K. Donahue, pres. & COO	498	NA	0	NA		NA			NA
OK RNATIONAL											
	2734.5	P. B. Fireman, chmn., pres. & CEO	2007	-86	0	31436	278	5	22.3	43.7	4
	28.5	J. H. Duerden, sr. v-p; pres. & CEO-sub.	969	62	0	NA		NA			NA
	2952.4	L. R. Pugh, chmn., pres. & CEO	1475	66	0	3562	148	2	16.5	12.3	2
	17.8	G. G. Johnson, v-p-Finance & CFO	568	51	318	1670		2			2
TIRE & RUBBER (INDUSTRIAL: LOW TECH)											
PER TIRE IBBER											
	1001.1	I. W. Gorr, chmn. & CEO	718	10	126	2215	430	1	18.3	13.4	1
	18.1	W. T. Fitzgerald, pres.†	695	17	140	1958		1			1
DYEAR TIRE & BER											
	10906.8	S. C. Gault, chmn. & CEO	777*	NA	1937	NA	112	NA	3.2	-84.2	NA
	2.7	H. M. Wells, pres. & COO	746	133	0	1509		2			4
*Joined company 6/4/91.											

Footnotes on page 148

EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
35 TOBACCO (CONSUMER PRODUCTS)											
AMERICAN BRANDS	8379.0	W. J. Alley, chmn. & CEO	1826	12	89	5493	150	3	18.7	-9.8	3
	19.0	T. C. Hays, pres. & COO	1043	10	91	3297		3			3
		Shares of restricted stock granted: chmn., 10,000; pres., 5,000.									
PHILIP MORRIS	48064.0	M. A. Miles, chmn. & CEO	1777	35	0	11335	334	3	30.6	16.8	3
	31.4	H. Maxwell, chmn. & CEO†	1741	-28	13937	27486		5			4
		Shares of restricted stock granted: retired chmn., 150,000.									
RJR NABISCO HOLDINGS	14989.0	L. V. Gersner Jr., chmn. & CEO	3179	10	3597e	28641	12	5	-37.7	-90.0	5
	2.4	H. J. Greeniaus, pres.-sub.	1052	7	0	8570		5			5
UST	907.3	L. F. Bantle, chmn. & CEO	2441	9	2705	13154	336	3	47.6	56.9	2
	56.1	R. L. Rossi, vice-chmn.	1469	16	6728	10619		4			3
36 TRUCKING (TRANSPORTATION)											
ROADWAY SERVICES	3177.0	J. M. Clapp, chmn. & pres.	767	8	407e	2604	212	1	14.3	19.5	1
	14.3	D. J. Sullivan, v-p & group exec.	669	32	138e	NA		NA			NA
37 UTILITIES (UTILITIES)											
ALLEGHENY POWER SYSTEM	2282.2	K. Bergman, pres. & CEO	495	5	0	1331	144	2	11.9	-13.9	2
	11.6	A. J. Noia, pres.-sub.	221	NA	0	NA		NA			NA
AMERICAN ELECTRIC POWER	5046.6	W. S. White Jr., chmn.†	756	-4	39	2238	152	4	12.7	-20.4	3
	11.8	R. E. Disbrow, chmn. & CEO-Co. & subs.	618	14	0	1588		4			3
BALTIMORE G&E	2459.5	G. V. McGowan, chmn. & CEO	511	8	0	1485	130	3	9.2	-39.0	4
	8.9	C. H. Poindexter, vice-chmn.	349	8	0	1020		3			5
		Shares of restricted stock granted: chmn., 10,700; vice-chmn., 7,800.									
CAROLINA POWER & LIGHT	2685.8	S. H. Smith Jr., chmn., pres. & CEO	578	32	0	1429	168	2	13.3	106.7	1
	14.7	W. E. Graham Jr., vice-chmn.	351	33	0	860		1			1
CENTERIOR ENERGY	2560.3	R. A. Miller, chmn. & CEO-Co. & sub.†	505	8	42	1447	183	2	9.1	NA	1
	8.3	R. J. Farling, pres. & COO-Co. & sub.	297	12	15	819		1			1
CENTRAL & SOUTH WEST	3047.0	E. R. Brooks, chmn., pres. & CEO	497	30	52	1339	195	1	12.6	5.9	2
	13.2	T. V. Shockley III, exec. v-p	354	22	32	925		1			2
COMMONWEALTH EDISON	6275.5	J. J. O'Connor, chmn.	671	11	0	1817	148	3	3.2	-96.8	5
	0.3	B. L. Thomas, pres.	369	10	0	1013		2			5
CONSOLIDATED EDISON OF NY	5873.1	E. R. McGrath, chmn., pres. & CEO	803	27	0	1984	146	4	12.1	-13.9	3
	11.5	R. J. McCann, exec. v-p & CFO	437	9	34	1365		4			3
CONSOLIDATED NATURAL GAS	2607.0	G. A. Davidson Jr., chmn. & CEO	593	12	167	1993	120	4	9.6	-24.4	4
	8.9	L. D. Johnson, sr. v-p & CFO	289	13	48	911		2			3
DETROIT EDISON	3591.5	J. E. Lobbia, chmn., pres. & CEO	522	18	0	1280	231	1	18.0	NA	1
	18.9	L. G. Garberding, exec. v-p & CFO	362	66	0	NA		NA			NA
DOMINION RESOURCES	3785.7	W. W. Berry, chmn.-Co. & Vir. Pwr.	685	-1	0	1966	159	3	12.1	-12.8	3
	11.9	T. E. Capps, pres. & CEO; vice-chmn.-sub.	643	5	4	1675		5			4
		Shares of restricted stock granted: chmn., 2,850; pres., 2,850.									
DUKE POWER	3817.0	W. S. Lee, chmn., pres. & CEO	625	20	0	1696	172	2	13.3	13.5	2
	13.0	W. H. Owen, exec. v-p	327	4	0	936		2			1
ENTERGY	4051.4	E. Lupberger, chmn. & CEO	642	-15	39	2112	205	3	3.9	35.5	4
	11.4	J. L. Maulden, group pres.	595	38	33	1561		2			4
FLORIDA PROGRESS	2074.7	J. B. Critchfield, chmn. & CEO	596	17	0	1474	157	2	NA	NA	NA
	11.0	A. J. Keesler, Jr., group v-p	448	9	0	1213		3			NA
FPL GROUP	5249.4	J. L. Broadhead, chmn., pres. & CEO	1120	29	0	3076	141	5	3.6	-18.2	5
	11.2	S. E. Frank, pres. & COO-sub.	663	77	0	NA		NA			NA
		Shares of restricted stock granted: Frank, 5,644.									
GENERAL PUBLIC UTILITIES	3371.6	W. G. Kuhns, chmn.	537	NA	0	NA	163	NA	11.9	-32.7	NA
	9.4	I. H. Jolles, sr. v-p & gen. counsel	346	-1	0	NA		NA			NA
		Shares of restricted stock granted: chmn., 5,000; sr. v-p, 2,000									
HOUSTON INDUSTRIES	4443.7	D. D. Jordan, chmn., pres. & CEO	829	3	32	2344	190	3	10.8	1.3	3
	11.8	D. D. Sykora, v-p; pres. & COO-sub.	549	6	21	1537		3			3
LONG ISLAND LIGHTING	2548.9	W. J. Catacosinos, chmn. & CEO	455	15	0	1394	219	1	4.8	26.2	3
	11.2	A. F. Earley Jr., pres. & COO	239	11	0	711		1			2
NIAGARA MOHAWK POWER	3382.5	W. J. Donlon, chmn. & CEO	433	41	0	1058	145	2	5.7	13.1	3
	9.6	B. R. Sylvia, exec. v-p-Nuclear	317	96	0	NA		NA			NA
NORTHEAST UTILITIES	2753.8	W. B. Ellis, chmn. & CEO†	524	5	92e	1669	145	3	12.0	3.1	2
	12.6	B. M. Fox, pres. & COO†	418	15	58e	1185		3			2
NORTHERN STATES POWER	2201.2	J. J. Howard, chmn. & CEO	712	29	45	1913	152	4	12.4	-12.1	3
	12.0	E. M. Theisen, pres. & COO	433	57	20	NA		NA			NA
		Shares of restricted stock granted: chmn., 4,232; pres., 2,166.									
OHIO EDISON	2358.9	J. T. Rogers Jr., chmn.-Co. & sub.	526	28	0	1370	136	2	11.0	37.6	2
	10.1	D. W. Tschappat, vice-chmn.	387	33	0	968		2			2
PACIFIC GAS & ELECTRIC	9778.1	R. A. Clarke, chmn. & CEO†	1461	33	0	3256	212	4	11.6	NA	2
	12.2	S. T. Skinner, pres. & COO†	939	35	113	2223		4			2
PACIFICORP	4007.0	A. M. Gleason, pres. & CEO	1055	10	1166e	4013	166	5	14.3	-2.8	4
	14.1	G. K. Drummond, exec. v-p; chmn.-sub.	822	20	340e	2780		5			4

Footnotes on page 148

Who knows
your disability insurance
needs best?



EXECUTIVE COMPENSATION SCOREBOARD

COMPANY	1991 SALES: \$ MILLIONS ROE %	EXECUTIVE	1991 COMPENSATION			1989-91 PAY-PERFORMANCE ANALYSIS					
			TOTAL ANNUAL COMP. SALARY & BONUS \$000	% CHANGE FROM 1990	LONG- TERM COMP. \$000	PAY VS. SHAREHOLDER RETURN TOTAL COMP \$000	\$ VALUE OF \$100 INVESTED	RATING	PAY VS. CORPORATE PROFIT ROE %	CHANGE IN ROE %	RATING
PENNSYLVANIA POWER & LIGHT	2559.7 13.2	J. T. Kauffman, chmn. & CEO W. F. Hecht, pres. & COO Shares of restricted stock granted: chmn., 1,480; pres., 970.	437 280	31 36	0 0	1020 NA	170	1 NA	13.6	-3.2	1 NA
PHILADELPHIA ELECTRIC	3975.8 12.0	J. F. Paquette Jr., chmn. & CEO C. A. McNeill Jr., pres. & COO	696 474	38 46	0 0	1820 1286	154	3 3	8.6	-7.7	4 4
POTOMAC ELECTRIC POWER	1552.1 11.5	E. F. Mitchell, pres. & CEO H. L. Davis, vice-chmn. & CFO	608 459	36 34	0 0	1543 1198	146	3 3	12.5	-28.7	3 3
PUBLIC SERVICE ENTERPRISES	5093.2 11.4	E. J. Ferland, chmn., pres. & CEO-Co. & sub. E. L. Morris, v-p; sr. exec. v-p-sub.	820 445	12 5	86 41	2412 1366	145	4 4	12.2	-15.2	4 3
SAN DIEGO GAS & ELECTRIC	1789.0 14.5	T. A. Page, chmn. & CEO J. E. Thomas, pres. & COO	724 344	1 -5	165e 65e	2584 1222	139	5 3	14.6	0.7	3 2
SCECORP	7502.5 12.4	J. E. Bryson, chmn. & CEO-Co. & sub. M. R. Peevey, pres.-Co. & sub.	810 616	60 28	126 123	1949 1711	169	3 4	13.8	-17.8	3 3
SOUTHERN	8049.8 12.6	E. L. Addison, pres. & CEO† J. M. Farley, exec. v-p & gen. couns.†	972 746	10 15	0 0	2643 1988	182	4 5	11.3	-0.7	4 4
TECO ENERGY	1154.1 16.3	T. L. Guzzle, chmn., pres. & CEO G. F. Anderson, exec. v-p-utility ops.	562 329	7 12	384 137	1978 1045	196	2 2	16.1	11.9	2 1
TEXAS UTILITIES	4893.2 -6.5	J. S. Farrington, chmn. & CEO E. Nye, pres.	658 494	0 -5	35 25	1852 1413	180	3 3	6.1	-157.3	5 5
UNION ELECTRIC	2096.9 14.6	W. E. Cornelius, chmn. & CEO E. K. Dille, pres.	660 436	19 20	0 0	1740 1143	186	2 2	14.0	6.0	2 2
WHEELABRATOR TECHNOLOGIES	1173.4 15.9	R. C. Gilbert, pres. & COO W. C. Keightley, controller	468 238	6 NA	1601 0	2915 NA	NA	NA NA	11.6	94.5	2 NA
WISCONSIN ENERGY	1538.9 13.1	R. A. Abdo, chmn., pres. & CEO J. W. Boston, v-p; pres. & COO-sub.	454 283	36 NA	0 0	1036 NA	165	1 NA	13.8	-12.3	1 NA

ALPHABETICAL LIST OF COMPANIES

The number following each identifies the Scoreboard category under which it is listed

Abbott Laboratories 11	Becton, Dickinson 11	Consolidated Rail 27	Ford Motor 4	KMart 29	National City 5	Quaker Oats 13	Tele-Communications 20
Aetna Life & Casualty 21	Bell Atlantic 32	Cooper Industries 12	FPL Group 37	Kellogg 13	Natl. Medical Enter. 30	Ralston Purina 13	Temple-Inland 10
AFLAC 21	BellSouth 32	Cooper Tire & Rubber 34	Franklin Resources 21	Kemper 21	NationsBank 5	Reader's Digest 26	Tenneco 9
Ahmanson (H.F.) 21	Berkshire Hathaway 21	Corestates Financial 5	Freight-McMoran 8	Kerr-McGee 20	New York Times 26	Reebok International 33	Texaco 20
Air Products & Chemicals 8	Betz Laboratories 8	Corning 19	Gannett 26	Keycorp 5	Newell 19	Republic New York 5	Texas Instruments 12
Albertson's 28	Biomet 11	Costco Wholesale 29	Genentech 11	Kimberly-Clark 24	Newmont Gold 18	Reynolds Metals 18	Texas Utilities 37
Allegheny Power Sys. 37	Block H&R 21	CPC International 13	General Dynamics 1	Knight-Ridder 26	Newmont Mining 18	Rhone-Poulenc Rorer 11	Texttron 9
Allied Signal 9	Blockbuster Ent. 17	CSX 27	General Electric 9	Lilly (Eli) 11	Niagara Mohawk 37	RJR Nabisco Hlds 35	Times Mirror 26
Alltel 32	Boeing 1	Deere 15	General Mills 13	The Limited 29	Nike 33	Roadway Services 36	Torchmark 21
Aluminum Co. of Amer. 18	Borden 13	Delta Air Lines 2	General Motors 4	Litton Industries 12	Nordstrom 29	Rockwell Intl. 9	Transamerica 21
Alza 11	Bristol-Myers Squibb 11	Deluxe 22	General Public Utilities 37	Liz Claiborne 33	Norfolk Southern 27	Rohm & Haas 8	Travelers 21
Amerada Hess 20	Browning-Ferris 30	Detroit Edison 37	General Re 21	Lockheed 1	Northeast Utilities 37	Rubbermaid 19	Tribune 26
American Brands 35	Burlington Northern 27	Digital Equipment 22	Genuine Parts 30	Loews 21	Northern States Power 37	Ryder System 30	TRW 9
American Cyanamid 8	Burlington Resources 20	Disney (Walt) 17	Georgia-Pacific 24	Long Island Lighting 37	Norwest 5	Safeco 21	Tyco Laboratories 15
American Electric Pwr 37	Campbell Soup 13	Dominion Resources 37	Gillette 25	Louisiana-Pacific 24	Novell 22	Salomon 21	Tyson Foods 13
American Express 21	Capital Cities/ABC 26	Donnelley (R.R.) & Sons 30	Golden West Financial 21	Lubrizol 8	Nucor 31	San Diego G&E 37	U.S. Bancorp 5
American General 21	Capital Holding 21	Dover 15	Goodyear 34	Lyondell Petrochemical 8	Nynex 32	Santa Fe Pacific 27	U.S. Surgical 11
American Home 11	Carnival Cruise Lines 17	Dow Chemical 8	Grainger (W.W.) 30	Marion Merrell Dow 11	Occidental Petroleum 20	Sara Lee 13	UAL 2
American Intl. Group 21	Carolina Power & Light 37	Dow Jones 26	Great Lakes Chemical 8	Marsh & McLennan 21	Ohio Edison 37	Scearoph 11	Union Camp 24
Ameritech 32	Caterpillar 15	Dresser Industries 23	Great Western 21	Martin Marietta 1	Oracle Systems 22	Schering-Plough 11	Union Carbide 8
Amgen 11	CBS 26	Du Pont 8	GTE 32	Mattel 17	Paccar 4	Schlumberger 23	Union Electric 37
Amoco 20	Centel 32	Duke Power 37	Halliburton 23	Maytag 3	Pacific Gas & Electric 37	Scott Paper 24	Union Pacific 27
AMP 12	Centerior Energy 37	Dun & Bradstreet 26	Hasbro 17	MBIA 21	Pacific Telesis Group 32	Scripps (E.W.) 26	United HealthCare 30
AMR 2	Central & South West 37	Duracell International 19	Heinz (H.J.) 13	MBNA 5	PacificCorp 37	Sears, Roebuck 29	United Technologies 1
Anheuser Busch 6	Chase Manhattan 5	Eastman Kodak 17	Hercules 8	McCaw Cellular Comm. 32	Pall 9	Sherwin-Williams 7	Unocal 20
Aon 21	Chemical Banking 5	Eaton 4	Hershey Foods 13	McCormick 13	Paramount Comms. 17	Sigma-Aldrich 11	Upjohn 11
Apple Computer 22	Chemical Waste 30	Emerson Electric 12	Hewlett-Packard 22	McDonnell Douglas 1	Parker-Hannifin 19	Southern 37	US West 32
Archer Daniels Midland 13	Chevron 20	Enron 20	Hillbrand Industries 19	McGraw-Hill 26	Penney (J.C.) 29	Southern New Eng. Tel. 32	USST 35
Arco Chemical 8	Chrysler 4	Energy 37	Hilton Hotels 14	MCI Communications 32	Pennsylvania P&L 37	Southwestern Bell 32	USX-Marathon Group 2
Ashland Oil 20	Chubb 21	Ethyl 8	Home Depot 29	Mead 24	Pennzoil 20	Sprint 32	VF 33
Atlantic Richfield 20	Cigna 21	Exxon 20	Honeywell 16	Medco Containment 29	PepsiCo 6	St. Jude Medical 11	Wachovia 5
AT&T 32	Cincinnati Financial 21	Fanniemae 21	Hormel (Geo. A.) 13	Medtronic 11	Pfizer 11	Stanley Works 15	Walgreen 29
Automatic Data 22	Cisco Systems 22	Fed Home Loan Mtg 21	Household International 9	Mellon Bank 5	Phelps Dodge 18	State Street Boston 5	Warner-Lambert 11
Autozone 29	Citicorp 5	Federal Express 30	Houston Industries 37	Melville 29	Philadelphia Electric 37	Stone Container 10	Washington Post 26
Avon Products 25	Clorox 25	Fifth Third Bancorp 5	Humana 30	Merck 11	Philip Morris 35	Stryker 11	Waste Management 31
Baker-Hughes 23	CNA Financial 21	CNA Bank System 5	Illinois Tool Works 19	Merrill Lynch 21	Phillips Petroleum 20	Student Loan Mktg. 21	Wells Fargo 5
Baltimore G&E 37	Coastal 20	First Chicago 5	Imcera Group 11	Microsoft 22	Pioneer Hi-Bred Intl. 13	Sun 20	Westinghouse Electric 1
Bank One 5	Coca-Cola 6	First Fidelity Bancorp 5	Ingersoll-Rand 15	Minnesota Min. & Mfg. 19	Piney Bowes 22	Sun Microsystems 22	Westvaco 24
Bank of New York 5	Coca-Cola Enterprises 6	First Interstate Bancorp 5	Intel 12	Mobil 20	PNC Financial 5	SunTrust Banks 5	Weyerhaeuser 24
BankAmerica 5	Colgate-Palmolive 25	First Union 5	Intl. Business Machines 22	Molex 12	Potomac Electric Power 37	Syntex 11	Wheelabrator Tech. 37
Bankers Trust 5	Commonwealth Edison 37	Fleet/Norstar 5	Intl. Flavors & Frag. 25	Monsanto 8	PPG Industries 7	Tysco 13	Whirlpool 3
Barnett Banks 5	Compaq Computer 22	Flightsafety Intl. 30	Intl. Paper 24	Morgan (J.P.) 5	Premier Industrial 30	Tyco Medical 30	Willamette Industries 2
Bausch & Lomb 11	Conagra 13	Florida Progress 37	ITT 9	Morgan Stanley Group 21	Price 29	Tambrands 25	Winn-Dixie Stores 28
Baxter International 11	Cons. Edison of NY 37	Fluor 30	Jefferson-Pilot 21	Motorola 12	Primerica 21	Tandem 22	Wisconsin Energy 37
Bear Stearns 21	Cons. Natural Gas 37	FMC 15	Johnson & Johnson 11	Nalco Chemical 8	Procter & Gamble 25	Trigley (Wm.) Jr. 13	Wrigley (Wm.) Jr. 37
					Public Service Ents. 37	Teco Energy 37	Xerox 22

UNUM. That's who.

- ▶ UNUM. You're covered by the nation's leading disability insurer.
- ▶ UNUM. You benefit from unequalled risk management and rehabilitation capabilities.
- ▶ UNUM. Meeting your benefit needs with disability plans, specialty employee benefits, retirement and long term care plans.



You can count on what we know.

UNUM Life Insurance Company of America, Portland, Maine 04122
(All states except New York)

First UNUM Life Insurance Company, Tarrytown, New York 10591
(New York state only)

© 1992 UNUM Corporation

1-800-634-8026

BANKING



CHEMICAL'S MOORE: HER UNIT GETS KUDOS FOR EFFICIENCY

FAT FEES, SLIM RISKS

Chemical Bank's lucrative niche in 'DIP' loans is attracting rivals

The profit is a huge number," says Chemical Banking Corp.'s Darla D. Moore. "It's one of the top, if not the top, profit makers at the bank. It's been hugely profitable beyond anyone's expectations."

Profit centers have been something of an endangered species at the nation's

banks, and huge profit centers are even rarer. Yet Chemical's restructuring and reorganization division, which Moore heads, is such an animal. It specializes in the lucrative business of lending to companies in bankruptcy to help them get back on their feet. Bankruptcy lending has enabled Chemical to rake in some of

the fattest fees that bankers have seen in years. And while some experts point out that such lending is a relatively new business, with some untested legal areas, the level of risk appears to be low, and the losses, so far at least, minimal.

The biggest risk faced by bankruptcy lenders these days is competitive. With Chapter 11 filings up almost 300% from 1981 and leveraged buyouts unraveling daily, new players have been attracted to the game, most notably General Electric Capital Corp. (GECC).

PIONEER DAYS. Historically, most bankruptcy financing was provided by existing creditors of the bankrupt company, and in many cases, it still is. In 1984, though, Moore and Chemical pioneered the idea of acting as a third-party lender to bankrupt companies, technically known as "debtors-in-possession." Chemical says it has underwritten more than \$4 billion in committed DIP financings, although the dollar amount of loans outstanding is much less, since banks sell chunks of the DIP loans they underwrite to other banks.

After helping establish Chemical's DIP financing unit in 1984, Moore, who is married to financier Richard E. Rainwater, left to lead Manufacturers Hanover Corp.'s DIP business in 1991. Now she works for the new Chemical-Manufacturers Hanover combination as head of the restructuring division she had left. Moore's unit gets kudos from the industry for moving quickly and efficiently, qualities that are crucial in DIP financings, since debtors usually want to move swiftly.

The attractions of DIP lending are multifarious. Bankruptcy courts usually give DIP loans "superpriority" status—in other words, first claim to the debtor's cash flow and assets, as well as priority liens over certain assets that existing creditors already have liens on. And companies can't emerge from bankruptcy without paying off the DIP lender in full. "You're senior, you're secured, and you've got to be paid off, unless you agree to go forward," says James P. Heffernan of investment firm Whitman Heffernan Rhein & Co. "You've got the best of all worlds." Also limiting the

WHY LENDING TO BROKE COMPANIES PAYS HANDSOMELY

► **Lots of fees** Debtors pay a percent of the entire loan commitment up front, plus interest on the portion of the loan they use, fees on the unused portion of the loan

► **First in line** Through "superpriority" status granted by the Bankruptcy Court, lenders can get priority over all other creditors, including senior bank lenders

► **Assured payback** Unless the lender agrees to extend the loan, debtors aren't allowed to emerge from bankruptcy without repaying the lender in full

► **Modest drain on lender funds** Bankrupt companies often use the funding to comfort trade creditors and rarely draw down more than a third of the financing, if that

► **Little competition** Because lending to debtors is so specialized, there are few competitors, which has kept the pricing very lucrative.

DATA: DRI

inside is that many companies will get just a minimal portion of the committed funds, buying the loans mostly as insurance policies.

But there are questions about how at protection from the bankruptcy art would hold up if a company actually liquidates and wind up back in art. For example, if a borrower has to liquidate, the priority status a DIP lender's counted on could face legal challenges, says Donald E. McNees, head of financial institutions consulting practice at Towers Perrin. "What seemed like airtight legal contracts could suddenly be reinterpreted in a court of law. Even secured lenders may find they've to give their pound of flesh." Despite this warning, Moore insists that these loans are usually safe: "If you structure the financing properly and get appropriate court orders, it can be done with great prudence."

WORTH THE CANDLE. The new entrants and the risks are small compared to the popping fees DIP lenders can earn. For starters, companies must pay a 1.5% up-front fee on the entire principal amount of the DIP loan. Then, there's the premium interest rate charged on the portion of the funds used, which can range from 1.25% to 3% over the prime rate. Another interest rate is levied on the usually large portion of the unused amount. Then there are administrative fees, something called an "agent fee," and more. Potential lenders also require borrowers to pay them for preparing a plan—even if the debtor doesn't accept it. It's no wonder, then, that the competitive pressure on Chemical has intensified. Bankers Trust Co., which began pursuing DIP lending more aggressively in 1990, has already won big deals for Northland Corp. and Pan American World Airways Inc. and is co-agent with Chemical on R. H. Macy & Co.'s DIP financing. And the ranks of smaller players, including CIT Group/Business Credit Corp. and asset-based lender Congress Financial Corp., are growing.

But aggressive, well-financed GECC is the player Chemical most worries about. GECC is rapidly emerging as the main competitor for Chemical," says Wilbur Ross, senior managing director at Rothchild Inc. "It's out there very actively marketing itself and being fairly competitive on price and speed. In a lot of ways, it boils down to either GECC or Chemical." GECC has some special advantages as a nonbank lender. Says David Deutsch, a managing director at Concess Financial, a provider of DIP financing for middle-market companies: "GECC could be everyone's worst nightmare, cause their cost of funding is so low, because they issue top-rated commercial paper directly. And like other commercial finance companies, they're not encum-

bered by commercial-bank capital requirements and other regulations."

"One of our most competitive things is that we are willing to compete on price if we need to," says Jeffrey H. Coats, managing director of GE Capital Corporate Finance Group, a division of GECC. Since it formally entered the market in 1990, it has committed from \$2 billion to \$3 billion. It has clashed a number of times with Chemical, most recently in competing for Zale Corp.'s \$470 million DIP financing. GECC lost the bidding but walked away with \$750,000 for its effort.

Despite GECC's aggressive forays into the market, Moore professes unconcern about the impact on profits. Although loan pricing is down a bit, she says, there's still a healthy premium. It's well deserved, she says: "Even though the credit analysis is relatively straightforward, the execution of these transactions is incredibly complex. Sometimes you could argue that there's not enough

money in the world to pay you for getting into this fray."

Moore's competitors don't seem to think so. But they're making their efforts late in the game. As the economy recovers, bankruptcies and the DIP business should slow down in the next couple of years. "Then it becomes the plan-of-reorganization market," says Coats, for financing companies on the mend. "The interesting thing is the extension beyond DIP, such as recapitalizing a company," Moore adds. That's a less lucrative and perhaps even more competitive market. Moore will be up against Coats in that business, too.

Whatever happens, Moore seems supremely confident about maintaining Chemical's primacy. "I can do a DIP financing sleepwalking," she says. But with the business changing and rivals closing in, Moore might be well advised to keep her eyes open.

By Suzanne Woolley in New York

DEALS

INTEGRATED'S LATEST ACQUISITIONS: TWO BIG BIDDERS

Will the former highflier go to the Pritzkers or Michael Steinhardt?

Integrated Resources has been disintegrating for the past several years. One of the last decade's hottest acquirers, the financial-services company now is languishing in bankruptcy court with a crushing \$2 billion debt load. To raise money to pay its myriad creditors, Integrated has had to sell off many of the assets it added during the 1980s: an insurer, a money-management firm, a stock brokerage, a corporate-jet manufacturer, and many real estate limited partnerships, the company's specialty.

But unlike many casualties of the 1980s, Manhattan-based Integrated is not a dried-out husk. It's a takeover artist's prize. That is why it's attracted an array of eager suitors and engendered no small amount of acrimonious maneuvering by those with a stake in its fate. Currently, a couple of investment powerhouses are vying to acquire Integrated and bring it out of Chapter 11. The

ultrarich Pritzker family of Chicago and Steinhardt Management Co., headed by Wall Street whiz Michael H. Steinhardt, are floating heavyweight bids—\$200 million by the Pritzkers, \$237 million by Steinhardt. Bankers Trust New York Corp. also was a strong contender, bidding about \$210 million, but dropped out in January. If all goes well, the court should choose a winner this summer, and Integrated will change hands by yearend. The proceeds of the bidding will go into a fund to pay off creditors. But despite the hefty bids, creditors are likely to recover only a fraction of their claims.

RENT DUE. The allure of Integrated to bidders is that this 1980s sinner has retained a core of valuable assets (table), most of which should be real earners in the 1990s. "We still own things that are very, very attractive for any bidder," says Integrated CEO Frank W. Geller, its former

WHAT'S LEFT OF INTEGRATED

Company estimate of value*
Millions

CASH ON HAND	\$390
EQUIPMENT LEASING	10
Airplanes, computers, tractor-trailers	
OTHER OPERATING BUSINESSES	45
Musical instrument making, fireplace manufacturing, hotel management	
PARTNERSHIP SYNDICATION FEES**	300
SPONSORED PARTNERSHIPS***	40
MISCELLANEOUS	40
Insurance company, premiums from tax-sheltered annuities	
TOTAL	\$235

* Bidders value noncash assets at about half of company estimate ** Fees from limited partnerships set up by Integrated, which has no stake in them *** Partnerships where Integrated has an equity stake or is a lender

SOURCE: INTEGRATED RESOURCES INC.

chief counsel who took over in March. The prime asset: limited partnership syndication fees, also known as contract rights, which entitle Integrated Resources to a future share of the rental income from 147 property-investment groups it organized from 1978 to 1985. These partnerships of wealthy individuals mainly own fully occupied office buildings leased to such blue-chip corporate tenants as Federal Express, Hershey Foods, and Xerox. Annual payments to Integrated start in 1995. Although they begin at \$3 million, they are scheduled to swell to \$117 million in 2007.

Other assets offer a little less enticing profit potential. These include stakes in real estate partnerships, hurt by vacancy rates, but that the company insists remain profitable. Then there are partnerships that lease out airliners and other equipment such as buses and computers whose profits have dipped during the recession. One group, American Income Partners, rents planes to two carriers in Chapter 11—Continental Airline Holdings Inc. and Trans World Airlines Inc.—so its fortunes hinge on the outcome in court, which has the power to end leases.

The flushest asset, Integrated's \$390 million cash hoard, is out of bounds for an acquirer. It is reserved to pay off creditors. The fund is substantial because it holds the proceeds from such asset sales as the \$75 million that Canada's Bombardier Inc. paid for plane maker Learjet Corp. in 1990.

Integrated also contains a potentially horrific liability: 40 lawsuits filed by limited partners who got burned on Integrated-syndicated partnerships that are in bad shape. They seek millions in damages. "Regardless of the sale, our suits go on," vows Chicago attorney Herbert Beigel of Beigel & Sandler Ltd. Integrated blames the partnerships' woes on the poor real estate market.

MILKEN DISCIPLES. During its heyday, Integrated's go-go founders, brothers Selig and Jay Zises, happily expanded into all sorts of fields on the strength of junk-bond financing from Drexel Burnham Lambert Inc. and its doyen of debt, Michael R. Milken. Integrated reaped a bonanza selling limited partnerships, preaching the virtues of tax deductions for real estate investment losses. Then came a devastating triple whammy: the demise of tax breaks for partnerships in 1986, the stock market



"We still own things that are very, very attractive for any bidder," says Integrated CEO Frank W. Geller. Not as attractive are the 40 lawsuits still outstanding

crash in 1987, and the real estate slump beginning in 1989. The Zises brothers left, and Drexel Managing Director Stephen D. Weinroth became chief executive. The mess, however, was too big for him to sort out, and in early 1990, Integrated landed in Chapter 11.

That was a revolting development for Integrated's creditors. Right now, holders of Integrated's senior-ranked junk bonds—with interest rates ranging from 10% to 11%—stand to get about 40¢ on the dollar, while the lesser-ranked subordinated bonds (9% to 13%) will be lucky to regain 3¢. This, though, is subject to negotiation among the various parties. Creditors have clout in Chapter 11 proceedings, since they must O.K. any reorganization plan to bring a company out of bankruptcy. The senior creditors' lawyer, Kenneth Eckstein, a partner at New York's Kramer, Levin, Nessen, Kamen & Frankel, dryly observes: "We hope to get more money" than what the bidders have offered to date.

Integrated's two-year confinement in Chapter 11 stems from particularly cantankerous squabbling among creditors and suitors. The senior lenders had a running war with Bankers Trust, which emerged last summer as the leading bidder. They feared that the bank would make them an even skimpier settlement than other potential bidders then on the scene. After months of haggling, the Pritzkers appeared with a more attractive bid, so frustrated Bankers Trust bowed out in February. Steinhardt showed up a month later.

QUID PRO QUO? Another dust-up came Mar. 26, when the senior lenders ousted Weinroth, Integrated's CEO. The group was enraged that he favored Bankers Trust. They charged that Weinroth's pro-Bankers Trust stance was owing to the bank's supposedly promising him an equity stake in the new Integrated.

Both Bankers Trust and Weinroth denied the allegation. "We had nothing overt, nothing covert, not as much as a wink between us," insists Weinroth, who hammered out an agreement to get \$2.25 million in severance pay after it was clear he had lost the senior lenders' confidence. Weinroth says the creditors' snub of Bankers Trust has only prolonged the costly bankruptcy process: Legal and other expenses are running about \$2.5 million per month.

So who will win the bidding—the Pritzkers or Steinhardt? The two sides aren't talking about their bids, which are still being fleshed out. The junior debtholders, though, are warmer toward Steinhardt because he offered more cash up front. Although they claim neutrality, senior creditors are closer to the Pritzkers.

The family, which started the Hyatt Corp. hotel chain, has a long history of acquiring and successfully running businesses. Last year, for instance, the Pritzkers paid \$46 million for TIE/Communications Inc., a bankrupt maker of telephone equipment. Steinhardt has little operational experience: His pursuit of USAir Inc. in 1989 came to naught. But as a money manager, his financial prowess is legendary.

The winner will bag an enterprise that is an emaciated version of its former self. But with a little help, the reorganized company could regain a measure of its past glory.

By Larry Light in New York

Lufthansa now has a way to shorten your trip that has nothing to do with speed.



The new Lufthansa Business Class

Our new concept in Intercontinental Service.

We invested over \$40 million and 18 months to develop it. And with the help of our flight attendants, chefs and passengers, we created a new concept in service for Lufthansa Business and First Class. It's designed to lavish the most individualized attention on every passenger. It offers unsurpassed comfort that can make your flight go by that much quicker. For instance, you'll have the same flight attendant from your welcome drink generally to your last snack. And in Business Class,

you may need his or her suggestion on our new menus with dishes so delicious that our cuisine was admitted into the elite "Chaîne des Rôtisseurs." In First Class, our new personalized service means a real buffet breakfast. And on our 747s, a luxurious upstairs cabin redesigned exclusively for you. So in Business or First Class, you'll find our European standard of elegance at a new level—one that will show you time does fly when you're flying. The Lufthansa Intercontinental Service. A passionate beginning to a new era in flight.

A passion for perfection.SM



Lufthansa

For more information and reservations call 1-800-645-3880 or see your Travel Agent. Lufthansa is a participant in the mileage programs of United, Delta, and USAir.

NOBODY IS LAUGHING ABOUT THIS FUNNY MONEY NOW

A fiscal gambit once used to rescue S&Ls is now the stuff of lawsuits

In the mid-1980s, with many savings and loan associations on the verge of collapse and with the federal insurance fund all but broke, regulators came up with an ingenious rescue device: Healthy S&Ls willing to absorb their sick brethren were given a fictitious boost to their balance sheets—"supervisory goodwill"—that allowed them to meet capital standards. And they could carry this goodwill on their books for 40 years.

Now, this accounting ploy has become

sory goodwill was canceled. What's more, some sympathetic members of Congress want to convert the ersatz goodwill into real money for the thrifts, courtesy of the taxpayers.

One way to understand how this complex mess got started is to look at CalFed Inc., which agreed to take six failing California and Florida S&Ls off regulators' hands in the mid-1980s. The thrifts, though, had roughly \$600 million in negative net worth, which would have wreaked havoc with CalFed's balance

cans, notably Representative Bill McCollum (R-Fla.), whose home state includes a number of ailing thrifts. He says there are 53 relatively healthy thrifts that could fail if they can't use their goodwill to meet capital standards. Instead, McCollum wants the Resolution Trust Corp. to give the S&Ls cash in exchange for supervisory goodwill. He contends that the buyback would cost \$2.5 billion—vs. \$25 billion in potential bailout costs. "These are sound institutions with good core earnings and good management," he says. To press his point, McCollum says he will block any new funding for the thrift bailout until his colleagues agree.

BREACH OF CONTRACT. So far, McCollum hasn't won much support for his position. The Office of Thrift Supervision says only 17 thrifts would be lifted out of danger by a goodwill buyback.

Yet there's a good chance that the

S&Ls may get satisfaction in the courts. In the past appellate panels overruling lower courts have generally argued that Congress has a right to change regulatory policy. But Claims Court Chief Judge Loren A. Smith said in his decision that the abolition of goodwill in 1989 breached the contract that the government made with Winstar Inc., an investor group when it agreed to purchase a failed Minnesota S&L in 1984. "While Congress power to regulate is not impaired, the government may be compelled to pay for the results of its actions," Smith wrote.

The Claims Court is expected to move within a month to apply its Winstar ruling to a dozen other S&L breach-of-contract cases that are pending, including CalFed's. If Smith's ruling is upheld when reviewed

by the federal appeals court, hundreds of additional cases may flood in. Ultimately, the issue could end up in the Supreme Court.

Compared with the \$500 billion that Washington already has committed to the S&L bailout, any damages that thrift acquirors eventually collect on goodwill claims may seem like small potatoes. Yet the hit to taxpayers' pockets will be one more painful reminder of the folly of trying to save an industry with smoke-and-mirrors bookkeeping.

By Mike McNamee in Washington, with Ronald Grover in Los Angeles



THE BATTLE OVER GOODWILL

THRIFTS Many were allowed by regulators to add fictitious "supervisory goodwill" to their balance sheets during the mid-'80s in return for taking over failing S&Ls. After promising they could use the goodwill for 40 years, the government in 1989 wiped it out. Thrifts say that's not fair. Without the goodwill, supporters say more than 50 thrifts would not meet capital standards and could fail

VS.

GOVERNMENT Regulators and lawmakers argue that such fiscal finagling artificially conceals thrift industry problems. Regulators claim predictions of numerous failures are overblown. Restoring goodwill may affect the fate of only 17 S&Ls

DATA BW

a hotly contested legal and political issue that has potentially widespread impact on the thrift industry. The dispute began in 1989, when the government, despite its promise of 40 years, passed the S&L bailout bill, which ordered S&Ls to phase out the goodwill by 1994. Thrifts cried foul. Although they have sometimes won injunctions staying the elimination, they lost attempts to void the law's provision. But recently, they scored a key victory: On Apr. 21, the U.S. Claims Court ruled that the government must pay damages to the acquirors of a Minnesota S&L that failed after its supervi-

sheet. So regulators wiped out the negative net worth by allowing CalFed a similar amount in freshly minted goodwill.

Since then, CalFed's fortunes have changed radically. The 1989 abolition of supervisory goodwill will reduce its capital base by \$86.6 million this year and could bring it to the brink of a regulatory takeover. More than 350 thrifts that received supervisory goodwill have also been affected, to the tune of \$5 billion to \$7.5 billion.

S&Ls that think they have gotten a bum deal from the government are getting support from some House Republi-

BEST UNIX SERVER **PRICE-PERFORMANCE**

1. Sun SPARCserver 690MP
\$8,854 per tps-A 95.41 tps-A
2. Bull DPX/2 384
\$9,902 per tps-A 63.85 tps-A
3. Data General AViiON 5225
\$11,498 per tps-A 50.80 tps-A
4. HP 9000 Series 817S
\$11,830 per tps-A 51.20 tps-A
5. IBM RS6000/560
\$12,671 per tps-A 72.00 tps-A
6. AT&T/NCR StarServer E
\$14,520 per tps-A 24.84 tps-A
7. Sequent Symmetry S2000/700
\$14,662 per tps-A 168.91 tps-A
8. Unisys U6000/55
\$21,700 per tps-A 9.99 tps-A

On March 6, 1992 the Transaction Processing Performance Council published TPC-A benchmarks for 38 UNIX servers. This list represents each vendor's best price-performance server.

Our new server has created something of a cult. We already have 37 followers.

Even though our new multiprocessor servers have been around only a few months, they've attracted quite a following.

Take these recent database performance benchmarks, for instance*: The Sun™ SPARCserver™ 690MP delivered the best price-performance among 38 UNIX servers. Not bad, considering those servers included the best of IBM, Hewlett-Packard, Unisys, Sequent, and others.

Our SPARCserver systems have attracted a following in other quarters, too.

The leading database vendors seem to like them — Informix, Ingres, Oracle, Software A.G. and Sybase all have products shipping today.

And then there are the database users. It's hard to say what they value most in a SPARCserver system: the affordable power, the ability to support hundreds of people, or the upgradeable CPU modules that ensure a cost-effective growth path to next-generation technologies.

But this much we do know: Companies like yours snatched up a record 2,600 new SPARCserver systems in the first 60 days.

To learn more about the UNIX server that leads all others in database price-performance, call 1-800-426-5321 ext. 470 for a Database Performance Brief. We'll even include the TPC-A results for the 37 other servers tested.

That way, you can learn something about the followers, too.

 **Sun Microsystems**
Computer Corporation



*the SPARCserver 690MP (left)
one of a family of powerful,
affordable multiprocessor servers.*

*Published by the Transaction Processing Performance Council, Benchmark A, March 6, 1992. Benchmarks achieved running Sybase SQL Server 4.8 software. © 1992 Sun Microsystems, Inc. Sun, Sun Microsystems and the Sun Logo are trademarks or registered trademarks of Sun Microsystems, Inc. All SPARC trademarks, including the SCD Compliant Logo, are trademarks or registered trademarks of SPARC International, Inc. SPARCserver is licensed exclusively to Sun Microsystems, Inc. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. All other product or service names mentioned herein are trademarks of their respective owners.

BY GENE G. MARCIAL

IS SPRINT ABOUT TO BE CHASED BY A SUITOR?

Sprint hasn't exactly won any popularity contests on the Street lately—despite Candice Bergen's winsome television commercials. "Most analysts are still pretty negative on Sprint because its earnings have disappointed in the past two years," says Oppenheimer analyst Mike Elling.

So when Sprint came out on Apr. 15 with a better-than-expected first-quarter profit of 45¢ a share vs. the 36¢ consensus estimate, the stock jumped from 21½ a share to 23¾. Sprint—its name was changed from United Telecommunications in February—earned 38¢ in 1991's first quarter.

Elling believes future surprises will also be on the upside. He expects other analysts who have been wary to start revising upward their 1992 estimates from the current range of \$1.80 to \$1.85. He's sticking to his \$1.95 estimate. In sum, Elling contends, the company is the cheapest stock in the telecommunications universe.

'WELCOME OR NOT.' Earnings aren't the only thing prompting some big pros to snap up Sprint shares at current prices. "There's creeping speculation," says one investor, "that a large company is eyeing Sprint's long-distance telephone operations and may bid for them—welcome or not." The company's U.S. Sprint service is the nation's third-largest long-distance carrier, serving some 6 million customers worldwide. Elling thinks a buyer could come from any of the following groups: a giant financial company, a major computer/telecommunications or cable TV company, or a big foreign conglomerate. A Sprint spokeswoman said the company doesn't comment on market rumors.

A low-ball estimate of its assets puts the value of U.S. Sprint long-distance operations at about \$21 a share, net of debt, according to one pro who tracks the company closely. That's without any buyout premium. Sprint's local telephone operations, serving more than 4 million customers, are worth an additional \$20 a share, he adds. The company's other units, including telephone-directory publishing and supply distribution, are worth \$5, he figures.

Speculation about Sprint as a takeover bet reached its height last year,

SPRINT IS SNAPPING BACK



before the company bought back GTE's 19.9% stake in Sprint in February. That nipped speculation for a while. Elling says he isn't aware of any offers. And he doubts that Sprint's board will be an easy fight—if a suitor proves hostile.

Even without any kind of buyout deal, Elling argues that Sprint, with its improved balance sheet and estimated 1992 sales of \$9 billion, is worth \$55 a share, based on the value that the market assigns to MCI Communications and AT&T. He says that Sprint, selling at around 4 times cash flow and 11 times his 1992 estimate of \$1.95 a share, "represents the best value in the business and has the most upside potential as 1992 progresses."

NTN: TWO-WAY TV HITS PRIME TIME

Over the years, investment adviser John Westergaard, an old-hand on the Street, has shown a keen eye for undiscovered small-cap stocks—mostly in leading-edge technology. One find: NTN Communications, trading over-the-counter at 3¾ a share. Westergaard, who heads Westergaard Communications, an investment research firm, sees NTN rocketing to 12 within 18 months.

NTN offers participatory television programming, often referred to as interactive TV, and has developed its own software for such broadcasts. Right now, it airs interactive sports and game-show programs 24 hours a day at subscribing bars and lounges, restaurants, colleges, and even military bases. Viewers respond via a wireless keypad, trade-named Playmaker.

The most popular NTN product is a game called *QBI* where viewers predict the outcome of various plays during a live football game for special prizes. It has a renewable five-year license to broadcast all National Football League games. NTN markets hockey and baseball games, which are also based on live broadcasts. The programming is transmitted via satellite. NTN, which also airs trivia quiz shows, is testing interactive TV in 400,000 homes, as well as uses in schools, for home shopping, and for polling.

General Motors and Miller Brewing advertise directly on NTN's programs, adding to the broadcaster's income from subscribers. Westergaard estimates revenues of \$10 million in 1992 and \$20 million in 1993, with earnings of 20¢ a share this year and 80¢ next year, up from last year's sales of \$3.8 million and a modest loss.

OXFORD IS ONE HEALTHY HMO

When money manager Arnold Schmeidler was shopping for a managed-care company that would provide his investment firm with quality medical services at the most competitive cost, he came across Oxford Health Plans. He was so impressed that he not only signed up his company, A. R. Schmeidler & Co., for Oxford's services but also purchased Oxford shares. Now at 19 a share, the stock is one of his biggest holdings.

What's so hot about Oxford? Operating only in New York, Connecticut, and New Jersey—a \$20 billion to \$30 billion health-benefits market—Oxford has been moving ahead at a furious pace, with enrollment growing at a 60% annual rate. And it has plenty of room for more growth. Compared with a 46% penetration in San Francisco and 32% in Los Angeles, health maintenance organizations hold only 13% of the New York market. "With the pressure on Corporate America to contain their health costs and maintain benefits, the HMO market is assured of tremendous growth," says Schmeidler.

No wonder Oxford's revenues have jumped from \$5.6 million in 1987 to \$94.9 million last year. Schmeidler projects \$130 million this year. Earnings have gone up as fast: From a 71¢ loss in 1987, earnings shot up to 82¢ last year, and he expects a net of \$1.48 next year. Debt-free, with some \$10 a share in cash, Oxford "is a very cheap growth stock," says Schmeidler.

FREE INFORMATION FOR READERS OF **BusinessWeek**

Want more information about advertisers in this issue?

If so...

1. Review the list of advertisers below.
2. Circle the corresponding number on the postage-paid reader service card, complete the necessary information and drop in the mail.
3. Or, call toll-free Monday—Friday 8AM—5PM MST:

1-800-345-3550

When prompted, use keypad to enter this control number **8299600***

FINANCIAL PRODUCTS AND SERVICES

1. CIGNA Corporation
2. UNUM Life Insurance
3. Van Kampen Merritt

PRODUCTS/SERVICES

4. Acer
5. A.T. Cross Company
6. Bermuda Department of Tourism - Leisure Travel
7. Bermuda Department of Tourism - Meetings and Conferences
8. Bose Corporation
9. Canon Personal Copiers
10. Centel Corporation
11. China External Trade Development Council

12. Continental Airlines
13. Dialog Information Services
14. FileNet
15. Florsheim Shoe Co.
16. Hotel Lotte
17. Lexus
18. Lufthansa German Airlines
19. McDonnell Douglas Aircraft Company
20. Mita Copystar America
21. Northern Telecom
22. Ryder Transportation Resources
23. Siemens Corporation
24. Sun Microsystems
25. Unisys

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Golf/Schools

JOIN JOHNNY AT PEBBLE BEACH!

Tee It Up With The "STRAIGHTEST SHOOTER" In History
3 days, 4 nights of **GOLF, GOLF, GOLF!**
Luxury accommodations at The Lodge at Pebble Beach
The Ultimate Gift. The Ultimate Incentive
The Ultimate Golf Vacation

Johnny Miller
ULTIMATE GOLF EXPERIENCE

20 Golfers per Camp

For Info: (408) 293-4653

Office Supplies/Equipment

America's Lowest Priced Office Supplies Direct to You

**WHOLESALE
SUPPLY
Company**

Letter Size Pads Canary			
Order No: 811C PMICP	11 pt. manila folders Letter size, 1/3 cut Order No: 153LSMD \$299 Box/100	Data cartridge, 60MB, 600' length Order No: DC 600ATHM \$1849 Ea	9-Pin Dot Matrix Printer Order No: KXP1180POA \$14899

You simply won't find lower prices on brand name office supplies than at Wholesale Supply Company. Over 9,600 different items, same day shipping, and all at prices you have to see to believe. So call now for your free catalog.

1-800-962-9162

Ad Code 0085

Computers

BUY FACTORY DIRECT AND SAVE!

ALLUR
TECHNOLOGY

**386SX/20MHz
NOTEBOOK
\$1,499**



- 60MB Fast IDE Hard Drive
- 2MB RAM Memory Standard Upgradeable to 8MB
- 1.44MB 3.5" Floppy Drive
- VGA 640 x 480 resolution Backlit LCD display screen with 32 gray scales
- 1 Parallel Port, 1 Serial Port
- 1 Mouseport for PS/2™ Mouse
- Microsoft Windows 3.0
- Microsoft DOS 5.0 with DOS Shell & QBasic
- Weight 6.9 lbs
- Enhanced rechargeable NiCad Battery Pack: 3 hours of operation before recharging.
- Universal AC Power Adapter (95V to 264V)

- 30 day money-back guarantee
- Lifetime toll-free technical support
- 1-year warranty on parts and labor
- COD, leasing and net terms available

CALL AND ORDER TODAY!
1-800-488-3095
ALL MAJOR CREDIT CARDS ACCEPTED

Golf/Schools

LOWER YOUR GOLF HANDICAP... BUILD YOUR OWN PUTTING GREEN!

Step by step illustrated instructions for easy construction of a real grass practice green in your own backyard. Developed by a PGA golf course professional to putt like a regulation green. Not artificial.

Complete Instruction Manual \$39.95
...all you need to build your own green!
Check or Money Order to:
BERJES CO.
P.O. Box 34277-0277
Omaha, NE 68134

Business Opportunities

PERSONALIZED BOOKS FOR KIDS

- Earn Money From Home
- Make Money With Your Computer
- Print Personalized Children's Books
- Superb Quality • Unbeatable Price

DEALERSHIPS \$995

Best Personalized Books, Inc.
3107 Chapel Downs Drive
Dallas, Texas 75229 • (214) 357-6800

Health/Fitness

Executive BackChair

Engineered for customized orthopedic support to prevent and relieve back pain

- Built-in adjustable lumbar support
- Adjustable neck rest
- Forward-tilt feature



BackSaver FREE Color Catalog
1-800-251-2225 or write
53 Jeffrey Ave., Dept. BWE, Holliston, MA 01746

SWIM AT HOME IN AN ENDLESS POOL!

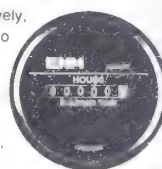
Now you can enjoy all the benefits of a full size pool in a space only 8' wide and 15' long. Swim in place against a smooth adjustable current. Experience the best form of exercise in the comfort and privacy of your own home. Easy installation. Affordable at \$12,500!

For information call:
1-800-732-8660
200 E. Dutton's Mill Rd
Aston, PA 19014



Time Counters

When you positively, absolutely have to keep the count in rugged conditions or in high and low temperatures, you can't beat a quiet, dependable



ELECTRO-MECHANICAL HOUR METER.

ENM Company
5617 Northwest Highway
Chicago, IL 60646-6135
Phone 312/775-8400 • Fax 312/775-5968

Business Opportunities

Personally Combine Environmental Awareness with Eco-Touristic Business Opportunity offering Guaranteed Return
Associate(s) needed for exclusive Manuel Antonio Beach Resort Development / Manageable US \$ amount



Free Associate(s) Beach Villa for 2 wks / yr
FREE Information 800-461-9409

Catalogs

OSHA MUST-SIGNS LOCKOUTS - FIRST AID KITS

Call or write for FREE catalog
Discount Business Equipment
& Supplies

INTEREX - Division

176 Newington Rd. W. Hartford, CT 06110
Call Toll Free 1-800-225-5910

Financial Services

SOCIAL SECURITY

Check Your Social Security
Account For Errors And Receive
Your 12 Page Social Security Ac-
count Earnings And Benefit State-
ment! Call Toll Free 1-800-666-0999.

Real Estate

The New Estate

POST AND BEAM HOMES. Designs range from 12th C
classics to your own vision of comfort and security.
Eastern Timber Homes, Inc.
Box 359 • Leverett, MA 01054
Providing:
• Finest materials including native woods
• Skilled artisans and consultants
• WEATHERTIGHT shell home packages
FREE INFORMATION: CALL TOLL FREE 1-800-742-5237

Cable TV

**CABLE TV DESCRAMBLERS
CONVERTERS, ACCESSORIES**
Name Brands. Lowest Prices. Best Service.
For FREE 16-page color catalog call
CABLE READY (800) 234-1006
COMPANY

FREE CATALOG! 1-800-345-8927
JERROLD HAMLIN OAK ETC.
CABLE TV DESCRAMBLERS

• Special Dealer Prices! • Compare Our Low Retail
Prices! • Orders From Stock Shipped Immediately!
• Guaranteed Warranties & Prices!
• All Major Credit Cards

PACIFIC CABLE CO., INC.
7325 1/2 Reseda, Dept 855 Reseda, CA 91335
For catalog, orders & info 1-800-345-8927

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Computer Software

Capture your company's
knowledge before someone
else does!

ACQUIRE™

Knowledge Acquisition Software for
Expert Systems PC ver \$995
Fax 604/479-0764 • Call 479-8646

Legal Speeding!

Sim it into second. Squeal the tires. Smash
down on the gas. And then, uh, slink over to
he shoulder when you're caught. On second
thought, maybe you'd rather speed up your
tales calls the legal way—with GeoQuery. The
Acintosh software that plots your customers'
names and addresses on an interactive map.
Call 800-541-0181 for GeoQuery details. And
roll in more sales, without getting pulled over.

Travel/Vacations

SOUTHWEST

The magazine for lovers of the
Southwest. Breathtaking photos,
travel tips. No ads. Vol. I, \$8.00

Publishing Concepts Corp.

3243 Highway 61 East
Luttrell, TN. 37779

Education/Instruction

COLLEGE DEGREE ACHELORS • MASTERS • DOCTORATE

For Work, Life and Academic
Experience • No Classroom
Attendance Required

Call (800) 423-3244

or send detailed resume
for Free Evaluation

Pacific Western University
600 N Sepulveda Blvd Dept 170
Los Angeles, CA 90049 USA

Business Services

RESEARCH REPORTS

9,278 academic topics available!
end \$2.00 for the 272-page catalog.
ustom-written reports also available

RESEARCH ASSISTANCE

11322 Idaho Ave., #206BF,

Los Angeles, CA 90025

Toll Free Hotline: 800-351-0222

(California: 310-477-8226)

NEED A NEWSLETTER?

Our one-stop design, printing and
mailing service makes it easy
hundreds of satisfied customers nationwide
ree info/prices: (800) 359-5993
OUTSIDE U.S. 904/386-3096 DATA EXPRESS, INC.

INCORPORATE Tax Free Nevada

ivacy, anonymity, asset protection (beats
et.). Even if you are already incorporated,
eat benefits for you. Also office and
rvices. **FREE literature**—call or write
ughlin Assoc., Inc., in business for over
o decades. 2533 N. Carson St., Carson
y, NV 89706. 1-800-648-0966.

Executive Gifts

**GREAT
ENCOURAGEMENT
FOR
SHIPWRIGHTS!**



All gentlemen shipwrights who
want to provide for themselves
amusement and satisfaction
through the traditional craft of
ship modeling, an opportunity
now offers to acquire, through
the minimal cost of one Colonial
Dollar (\$1.00) a catalogue of
fine ship model kits.

Send \$1.00 for a catalog to:
MODEL EXPO, Inc.
Dept. BW52A, PO Box 1000
Mt. Pocono, PA 18344

Corporate Gifts

UNIQUE—WATER POWERED DESK CLOCK!

RUNS FOR WEEKS ON ONE FILL!

- Date, Time, Seconds
- Any Logo/Design Imprintable

GREAT GIFT—QUANTITY PRICES

Send \$19.95 + \$3.00 P&H to

EXCALIBUR SALES CORP.

3000 Windsor Way • Tallahassee, FL 32312

Florida residents add 7% sales tax. Dealer inquiries invited.

**JAMEE WEST®
LOGO
WATCH**

**24 HRS.
advertisement**

Can you imagine a full color
company logo or any artistic
design on our elegant watch?
Anything is possible! Just
send us your company logo,
artwork or photo and we will
transform it on our exquisite
watch. Deluxe/Standard
watch with precision quartz
movements, leather strap
plus 1 year warranty.
Please send us \$15.95
(Lmt. 2 sample/company)
JAMEE WEST® LOGO WATCH
9816 GARDEN GROVE BLVD.
GARDEN GROVE, CA 92644
FAX 714-534-4673
1-800-635-2633

Wine Cellars

WINE CELLARS BY Vinotemp™

28 HANDMADE WOOD MODELS • 114 TO 3400 BOTTLES • MADE IN U.S.A.
FACTORY DIRECT TO YOU VISA — M/C — AMX
DISCOVER

MODEL	DESCRIPTION	APPRX CAPACITY	SUGG RETAIL	YOUR COST
440	Upright	400	\$2495	\$1695
700	Upright	600	2995	1995
296	Credenza	280	2695	1795
114	Compact	114	1395	995
230	Two Doors	230	1795	1195
700FUR	Fur Vault	8 to 10 Furs	2995	1995
700HH	His and Hers	300 bottles 4/5 Furs	3995	2995
Designers' non wood model 60 bottle glass door		899		659

Vinotemp Int'l • 134 W 131st St (PO Box 6161E) • Los Angeles, CA 90061
CALL 800/777-VINO (777-8466) or 213/719-9500 FAX 213/719-9518
IMMEDIATE SHIPMENT ON MOST MODELS. WE WILL NOT BE UNDERSOLD • CALL US FIRST

International Marketing

RUSSIAN OPPORTUNITIES

Russian businessmen in newly opened
territory are seeking partnership
in business and manufacturing.
Exclusive list with 100's of top contacts
available.

GLOBAL ACCESS CORP.
1-800-949-3012

Sales Promotion/Marketing

Sales Leads & Mailing Lists

- 9 Million U.S. Businesses -
Telephone Verified with Contact Name and Employee Size
- 1.7 Million High Income Americans • 84 Million Consumers Residents
- 1.2 Million Canadian Businesses • Opportunity Seekers

FREE Catalog - Call (402) 331-7169 or write
American Business Lists
P.O. Box 27347, Dept 01-062 • Omaha, NE 68127

Corporate Gifts

MUST LIQUIDATE!

Less Than 27¢ on the Dollar!

MITA® FAX Machine Model TC-200

Mita® is an office products com-
pany that makes expensive -
office quality goods.

Now you can get professional
quality goods at less than dis-
count store prices!

**AT THIS LOW PRICE,
OUT THEY GO! CALL NOW!**

Maximum features for minimum dollars!

- **Automatic Dialing** and Re-dial-
ing: 20 numbers for one-touch
dialing, 100 numbers for speed
dialing!
- **15 Second Transmission Speed**
- **Automatic paper cutter**
- **Transmission can be:**
 - reserved during receiving and
started immediately when reception has been
completed
 - started on receiving party
control
 - automatically started at a
pre-set time
 - confidential
- **Reception can be:**
 - automatic
 - scheduled for a set time

- stored in memory for later
print-out
- controlled by remote
unit
- screened by a pass-
word to prevent
junkfax

- Regular telephone and
handset
- Voice response for select
reception
- Date, time and transmis-
sion stamps
- **Group 2/3 Compatible**
- Copier features for
single or multiple
copies on thermal paper!
- **90 Day Limited
Factory Warranty!**

***Mfr. List
\$1895.00
OUT THEY GO!
\$499**
Item #H3991-8441
S/H \$12 Each

COMB

AUTHORIZED LIQUIDATORS*

1-800-522-3035

COMB CORP., Authorized Liquidator

720 Anderson Avenue, St. Cloud, MN 56395

To order by mail, include item #, name, address, day-
time phone, and check or money order. Please state
Segment Number 4128286. Sorry, no C.O.D.'s. Add
Shipping/Handling for each item. Add 6 1/2% sales tax
for MN delivery.



FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Corporate Gifts

IMAGE BUILDERS

PROMOTE YOUR BUSINESS...
EVERYDAY LOW PRICES ON...



IMPRINTED COFFEE MUGS AS LOW AS \$1.29

32 OZ SPORT BOTTLES AS LOW AS \$1.19

EMBROIDERED CAPS AS LOW AS \$4.45

YOUR LOGO HERE

Buddy TEAM

CHOOSE FROM
HUNDREDS OF ITEMS.
CALL FOR FREE CATALOG

1-800-792-2277
FAX 1-510-786-1111
THE CORPORATE CHOICE

Corporate Gifts

100% Cotton/Your Logo! — Better Than Lacoste or Ralph Lauren!



Our 100% Cotton, American Made polo shirts, custom embroidered with your logo are such good quality, we unequivocally and unconditionally guarantee them for an indefinite period of time! Free shipping for international orders. For a price list and catalogue please call:

1-800-847-4478

Fax 1-718-782-4614

The Queensboro Shirt Company
Dept BW25, 119 N 11th St., Greenpoint, NY 11211



Actual Size

Ambassador Lapel Flags®

Your Logo with any 2-flag mix

- 24K Gold finished • Full colors
- 100% U.S.A. -made

We'll custom-make any emblem for you!
Delivery: 14 business days Worldwide

TME Co., Inc. 101 Bel Air Drive
New Milford, CT 06776, U.S.A.
(800) 535-5255 • Fax (203) 354-2786

Menswear/Fashion

MEN'S WIDE SHOES

EE-EEEEEE, SIZES 5-13

Extra width for men who need it
Excellent variety, styling and quality
Send for **FREE CATALOG**



The Widest Selection of the Widest Shoes Anywhere!
HITCHCOCK SHOES, INC
Dept. 55E Hingham, MA 02043

International Study Programs

LEARN RUSSIAN on the BLACK SEA

(SOCHI) or MOSCOW: Mos. St. U.

Certif of Comp. Begin-Adv. Live

w/Russ Families & Russ. Students

Lectures by prominent people in

Russ. pol & bus life.

6/5-8/8: Sochi: Incl 7d. tour in Russ.

6/5-8/15: Sochi: Incl 14d.

7/7-8/15: Moscow: Incl 7d.

.....

7/7-8/1: COURSE FOR BUS. PEOPLE

130 hrs class work. Vacation & study

in mod a/c Sochi resort hotel w/class &

lect halls. Lect: see above. Tennis, pvt

beach, pool, riding. Optional: 7/14d tour

after course. Assist w/bus contacts & info

Virtus Ltd.: day, evng & wknd.

212-289-3120 or 1-800-274-9121

Security

HELPTAG®

EMERGENCY PLEASE NOTE: ANSWER IN PL. PEGASUS, AVONDA	
1 Betty Alexander Wife	451
2 Robert Williams Friend	451
3 John Peterson Doctor	451

HAT OUT AVONDA, BITE ZIL BENACHROCHTIGAN

Worn as a bracelet, or a neck chain

A LIFESAVER FOR YOU OR

YOUR LOVED ONES... seniors

children, travelers & active people

The watertight ID capsule with

emergency information - you fill in -

that "speaks" for you when you can't

Order / Information call: 1-800-HELPTAG

© Information Devices Inc. Dept. 104

P.O. Box 1474 • Pawtucket RI 02862

M/C & Visa • Starting @ \$14.95 (P&H \$ 2.95)



EXCLUSIVE MOUNTAIN RANGE

like new, lots of details, riv vu's,
original landscaping, a must-see,
willing to negotiate.

© David Muench 1991

Prime Real Estate. For years, The Nature Conservancy has purchased large tracts of it so that endangered species can flourish there. Now, as partners in the public television series Nature, we're helping provide another place where wildlife can flourish. To learn more about these and all of our activities, call 1-800-628-6860.

NATURE &



Nature appears Sundays
on PBS

THE INFOMERCIAL INCHES TOWARD RESPECTABILITY

Major companies and ad shops are warming up to the long spots

We're not going to do slicers, dicers, or banana spicers," says Robert Kennedy, president of Saatchi & Saatchi Advertising worldwide. His agency is getting into the business of infomercials. And Kennedy is deflecting suggestions that Saatchi will soon be knocking out 30-minute ads that peddle everything from ad-hammered woks to tooth whitening. But his remark provokes titters from two other Saatchi execs, who concede they still regard infomercials as an embarrassment: faintly embarrassing, at best kept out of sight.

Kennedy, though, is dead serious. In December, he set up a joint venture with the nation's No. 1 infomercial producer, Regal Group. Through the venture, called Hudson Street Partners, Saatchi has started wooing clients to use program-length ads that mix information and entertainment with sales pitches. Among the products it wants to promote are airlines and cars.

What's a top-ranked agency doing in the business? After all, Saatchi is the shop whose "Labor Isn't Working" slogan is credited with helping to topple the British government in 1978. That's a far cry from a garden-variety infomercial of, say, pro-football retiree Fran Tarkenton selling self-improvement tapes between 5 p.m. and 6 a.m. on a cable channel so you can dial up the dial you get a nosebleed reaching for it. Worse, even infomercials aren't immune to the recession: Richard E. Kaylor, chairman of Hudson Street Partners, figures total industry revenue slid from \$750 million to \$700 million in 1991.

BEATING THE BIGGIES. Yet Kaylor thinks infomercials are on the rebound. He predicts revenue will reach \$750 million in this year and top \$1 billion by 1993. What's more, the industry is slowly gaining credibility among mainstream marketers: Volvo, Club Med, and General Motors all have recently promoted products with 30-minute commercials. Revenue-starved TV stations are starting to air them at more desirable times. Even IBM executives are pondering the move. "The industry is overcoming its poor reputation as a fringe marketing

option," says James C. Reilly, general manager of U.S. marketing at IBM.

Kennedy and others say infomercials are a good solution to rising concerns about the effectiveness of advertising. Even high-quality infomercials cost roughly the same to produce as a 30-second spot—between \$375,000 and \$500,000—and most air during off-peak hours. More important, infomercials offer marketers two things a regular commercial can't: a way to stand out from the cacophony of short spots, and a way to measure results by the number of viewers who call the

NEW 30-MINUTE ADS SUCH AS VOLVO'S TAKE A MAINLY EDUCATIONAL APPROACH...

800 number usually featured. Makeup artist Victoria Jackson and self-help guru Tony Robbins have used infomercials to build thriving direct-response businesses. Even Presidential hopeful Jerry Brown has used one to make his 800 number a part of the political lexicon.

Now, mainstream marketers are trying to adapt the formula to sell cars and vacation packages. Volvo used an infomercial to promote its safety record to consumers in Southern California, where Japanese and German luxury carmakers dominate. "The story of auto safety is very difficult to do in 30 seconds," says Bob Austin, a spokesman for Volvo Cars of North America. The infomercial features a thorough discussion of Volvo's safety engineering. Toward the end, viewers are invited to dial an 800 number for a brochure with more

information. The infomercial generated 20,000 calls, 10,000 fewer than Volvo hoped. Even so, Austin says the carmaker may air the ad next in San Francisco.

Club Med also values infomercials because the company can promote its full range of vacation packages. In its infomercial, which airs on the Arts & Entertainment cable channel, Club Med presents vignettes of actual vacationers at two of its resorts. The infomercial is designed to catch even channel-hoppers. Michael Kubin, president of Club Med Sales Inc., says the sales pitch and 800 number are repeated frequently, so viewers can get the message before they switch to something else. Club Med has received more than 20,000 calls since the

... BUT IN THE PAST, THESE SPOTS HAVE SOLD GET-RICH-QUICK SCHEMES AND GIMMICKS

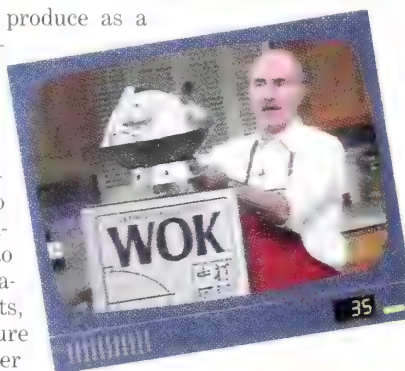
infomercial began airing last August.

CRAZY COUSIN. Kubin and others also appreciate that infomercials are no longer consigned to television oblivion. Club Med's spot for example, airs on WOR, a leading New York independent station. Several stations owned by CBS Inc. and NBC Inc. have dropped longtime bans. Kaylor figures only 20 of the nation's 1,200 broadcast stations still refuse them. They're even starting to air infomercials on weekend mornings.

The infomercial business still faces hurdles in its bid for big marketers. While it has buffed its reputation, there are lingering concerns that infomercials seek to deceive by cloaking ads in the guise of programming. Even some proponents say the

infomercial business will always be perceived as the crazy cousin of marketing, despite its efforts to police itself. "Some of us don't want to admit we're selling wrinkle cures," says infomercial producer Greg Renker. If Renker and his colleagues can persuade IBM and others to sign on, the infomercial business may find its own miracle cure.

By Mark Landler in New York



Style No.: 888
Size: Miss 6 - 12
Color Code: M-10
Fiber Content: 100% Wool
Fabric: Flannel
Cost: US\$ 45
Vendor: C. S. N.
Delivery: April 2 -



FOR BRILLIANT IDEAS IN COMPUTERS



Would it surprise you to know that some of the world's most advanced computer technology comes from Taiwan?

It shouldn't.

The fact is, one of the world's first 32-bit PC's was introduced by Taiwan. And nearly one third of all computer monitors, keyboards, scanners and graphic cards are not only made in Taiwan, they're very well made in Taiwan.

Computer components from Taiwan are among the finest in the world. In fact, advanced computer technology from Taiwan is helping industries as diverse as fashion, electronics, travel and real estate to be more successful by improving productivity and performance.

The computer shown here is just one example of the innovative technology coming from Taiwan today. Taiwan's engineers and manufacturers are dedicated to creating a wide range of high quality products to help you be more successful.

And that's the most brilliant idea of all.

ENTER TAIWAN.

**IT'S VERY WELL MADE IN
T A I W A N**

EDITED BY AMY DUNKIN



The Sandwich Generation

THE BABY BOOMERS' TRIPLE WHAMMY

Stacy Phillips has both a husband and a "wife." The latter is her sixty-something mother-in-law, who moved in with her and her son, Craig Bloomgarden, five years ago. The elder Bloomgarden manages the household and cares for her two-year-old grandson, Andrew, thus earning her keep and her wifely role.

The Los Angeles couple say that supporting the three-generation family is a challenge. Stacy, 33, and Craig, 34, both lawyers, regularly sock money into 401(k) plans, mutual

funds, and tax-free bonds, and they have started a college savings account for Andrew, but it means stretching every dollar. "We want to do a lot of saving, but we also have to deal with the here and now," says Stacy.

Stacy and Craig are among the 76 million baby boomers facing an unprecedented financial squeeze. Sandwiched between growing children and aging parents, they need to provide for tuition, their own future, and, in many cases, elder care. The cost of higher education is rising nearly

twice as fast as inflation. Retirement living expenses will be only 35% covered by government or corporate benefits when today's workers are ready to quit. And annual nursing-home bills could reach \$70,000. But instead of fattening bank accounts, the go-go '80s left much of the sandwich generation running in place.

SPEND AND BORROW. One problem for baby boomers is that the assumptions of the past 20 years aren't holding up. People can no longer take for granted that their houses

will appreciate significantly, providing them with a cash cushion later in life. They can't even count on the job market to keep them steadily employed. And today's workers are expected to shoulder a growing chunk of their own health and retirement costs. For many in the sandwich generation, the American dream means just staying afloat.

How did this gigantic slide of the population, born during the fat years after World War II, get into such a fix? Much of it wasn't their fault. Ma-

y boomers came of age in time for the first oil shock of 1973 and matured during the high-inflation decade that followed. The powerful lesson of those years—don't spend and borrow, since money is constantly losing value—has now come back to haunt them. That's one reason so many boomers, now 27 to 66 years old, are wrestling with financial stagnation at the age when their parents enjoyed a steady improvement in the standard of living.

Another is that boomers prolonged their youth, often living until their 30s before starting a family. For their parents, the financial burdens of children's education and

THEY'RE SQUEEZED BY TUITION, ELDER CARE, AND SAVING FOR RETIREMENT

their own retirement were spread out more evenly over their earning years.

Clearly, the sandwich generation needs some new financial strategies to cope with the realities of the '90s. The following pages will suggest investment approaches for meeting college costs, retirement expenses, and long-term elder care. But no matter

what your specific goal, the first step is learning how to live on less.

There's more to that than simply putting more money away. Baby boomers may need to rethink some basic lifestyle choices. Some have already started. Now that fewer young urban professionals are upwardly mobile, more are moving out of big cities to more affordable places. Former fast-trackers are realizing that putting all their career eggs in one basket could be dangerous. Instead, they're moonlighting, both to earn extra money and to prepare themselves for potential job upheaval.

Americans devote more

than 30% of their household expenditures to keeping a roof over their heads—and they're realizing it's too much. Rather than wringing their hands over trading up, debt-strapped homeowners might do better by cashing out and renting or by buying a less expensive property.

Finally, do what smart companies are doing in the 1990s: deleverage. If you're paying a mortgage rate of 11% or higher, refinance. Pay off your credit-card debt, and cut your high-interest cards in half. Instant gratification is a hard habit to break, but you'll feel much better controlling your money than letting it control you.

Joan Warner

you're in your early 40s, have a couple of small children, and don't stand to inherit a fortune, you're in a crunch. In 10 to 15 short years, you'll be getting annual college tuition bills upward of \$20,000—four years' worth for each kid. Then, if you are going to retire by age 65 and live well, you'll need enough money to match 70% of your final salary for at least another 10 years. How

do you raise the cash? Financial planners are unanimous in their advice: Save early and often. Which vehicles you use depends on your investment horizon. Low interest rates have made it easier to build a nest egg with the safest investments, such as Treasury securities or CDs. But the more money you have, the more aggressive you can afford to be.

BET. First, estimate accurately as possible how much you'll need when. For college savings, your best bet is working from current costs, adding in increases of about 6% a year at private institutions and 9% at public. At that rate, four years of state school could run \$40,000 by 2009, when today's freshmen turn 18, and a Harvard sheepskin \$200,000.

HOW TO NURTURE THREE NEST EGGS AT ONCE

The College Board, a nonprofit national academic association, tracks price trends at public, private, and Ivy League schools. Its College Cost Explorer software program (\$125) includes informa-

tion on risk you can absorb. A growth or stock-index mutual fund is a good starting point when your children are young. By making regular contributions, you'll be dollar-cost averaging, which means

your kids. Since children younger than 14 pay taxes in their parents' bracket, buying individual stocks can save you money over mutual-fund shares: You pay capital gains taxes only when you sell, not every time you realize a gain. Make sure the portfolio is diversified, and pick stocks you'll feel comfortable holding long term.

ZERO SUMS. When kids are older, and you don't want to entrust college funds to a fluctuating stock market, zero-coupon Treasury bonds can offer a sense of security. You buy them at a deep discount and redeem them at face value when they mature. You could pay \$739 for a four-year zero that will be worth \$1,000 in 1996—an annual yield of 6.37%.

The drawback is that you pay taxes on the bonds' imputed interest even though you don't collect it until maturity. And children younger than 14 pay taxes on any unearned income over \$1,100 at their parents' rate. One way to get around this is to shop for municipal zeros, sometimes called baccalaureate bonds. These are exempt from federal taxes and, for state residents, from state and local taxes as well. Plus, some states offer bondholders a

Strategies for Saving

A CRASH COURSE IN SAVING FOR COLLEGE

Here's how setting aside \$3,000 annually will grow

Investment strategy	When to use it	Sample return	Amount in 5 years	Amount in 10 years
STOCK				
MUTUAL FUND	Your child is 14 or younger	10%	\$23,147	\$55,594
VARIABLE ANNUITY	You'll be at least 59½ when child starts college	9%	\$22,570	\$52,681
MUNICIPAL ZERO-COUPON BONDS	You want a predictable return and tax deferral	7%	\$21,460	\$47,351
SERIES EE SAVINGS BONDS	You want utter safety and a possible tax break*	6%	\$20,926	\$44,915

*Tax exemptions disappear for families earning more than \$94,350 (AGI) a year in 1992

DATA BW

tion on tuition, living expenses, financial-aid availability, application requirements, and deadline dates for all accredited two- and four-year U.S. colleges (call 800-323-7155 to order).

How you invest college savings depends on how much

that over time, you hedge temporary market dips. Long term, stocks still outperform every other investment, historically yielding around 10%.

If you don't want to pay someone else to manage your money, you might instead build a stock portfolio for

over \$1,100 at their parents' rate. One way to get around this is to shop for municipal zeros, sometimes called baccalaureate bonds. These are exempt from federal taxes and, for state residents, from state and local taxes as well. Plus, some states offer bondholders a

Personal Business

small cash bonus if their child attends a state school.

After the kid turns 14, buy zeros in your child's name. Children over that age pay taxes in their own, lower bracket.

Series EE savings bonds, secured by the government, may be one of the safest places to park college cash. But their returns aren't very sexy, generally around 6%

risk as college approaches, and earnings grow tax-deferred. When the time comes to cash in, you won't pay the heavy penalty and surrender charges that a younger parent would owe.

How much to save each month? Many financial advisers are marketing "college planners." First, they create a formula based on estimated school costs, the number of

ry. It could take more if you travel a lot, buy a boat, or are hit with hefty medical bills.

Don't count too heavily on Social Security. Even if you've paid the maximum FICA tax, you now stand to collect a little less than \$15,000 a year in benefits (plus half as much for a non-working spouse).

Together, Social Security and a company pension may

on your present income and lifestyle. By calling 800 772-1213, you can order a form to see what Social Security may provide.

Next, get a projection of your pension. The figures are easy to come by if the company has a defined-benefit plan that guarantees you a specific sum. Forecasting is tougher if your company has a defined-contribution plan, where you contribute a percentage of your salary to your account each year or partially match what you put into a 401(k). Your pension will depend on how much goes in and how well the plan manager invests it. Or, if the company uses profit-sharing arrangements, reduced contributions in bad years may trim your pension.

INFLATION HEDGE. The projected difference between what you'll get and what you need is your savings goal. To keep inflation from eroding buying power, your savings should target investments earning four to six points above current inflation rates, says Stanley Breitbard, financial-services director at Prudential Waterhouse. Earn less, and your nest egg may show cracks.

Because you can't predict the future, it helps to develop some "what if" scenarios. You can do it on paper with free retirement-planning software from T. Rowe Price (800 635-5660). Or you can use some simple computer software that lets you do the number crunching on a home computer (BW—Feb. 24).

The starting place for savings is the 401(k) plan—or a Keogh if self-employed. Contributions to it reduce your gross income and trim your tax bill, so you have more dollars to invest. Standard advice says to fund it completely (10 to 20% of your wages, or a maximum \$8,728 this year). Depending on your age and salary, that may be enough to put you on the safe side.

Earnings also grow tax-deferred on insurance and annuities, and on mutual funds and other vehicles in an individual retirement account. Even if you can't claim a



KAREN PLATT-LEE, 42, AND HUSBAND STEVEN LEE, 39 (CENTER), WITH THEIR CHILDREN AND HER PARENTS: A GROWTH-STOCK FUND FOR EACH CHILD, \$7,800 ANNUALLY IN A 401(k), AND IRAs TOTALING \$31,000

now. Series EE bonds can be redeemed tax-free at maturity, provided the money goes toward college tuition and your adjusted gross income falls within certain limits. Families earning up to \$60,000 get a full tax exemption for EE bonds bought after Dec. 31, 1989, and the exemption phases out gradually as adjusted gross income approaches \$94,000. The ceilings are adjusted for inflation each year.

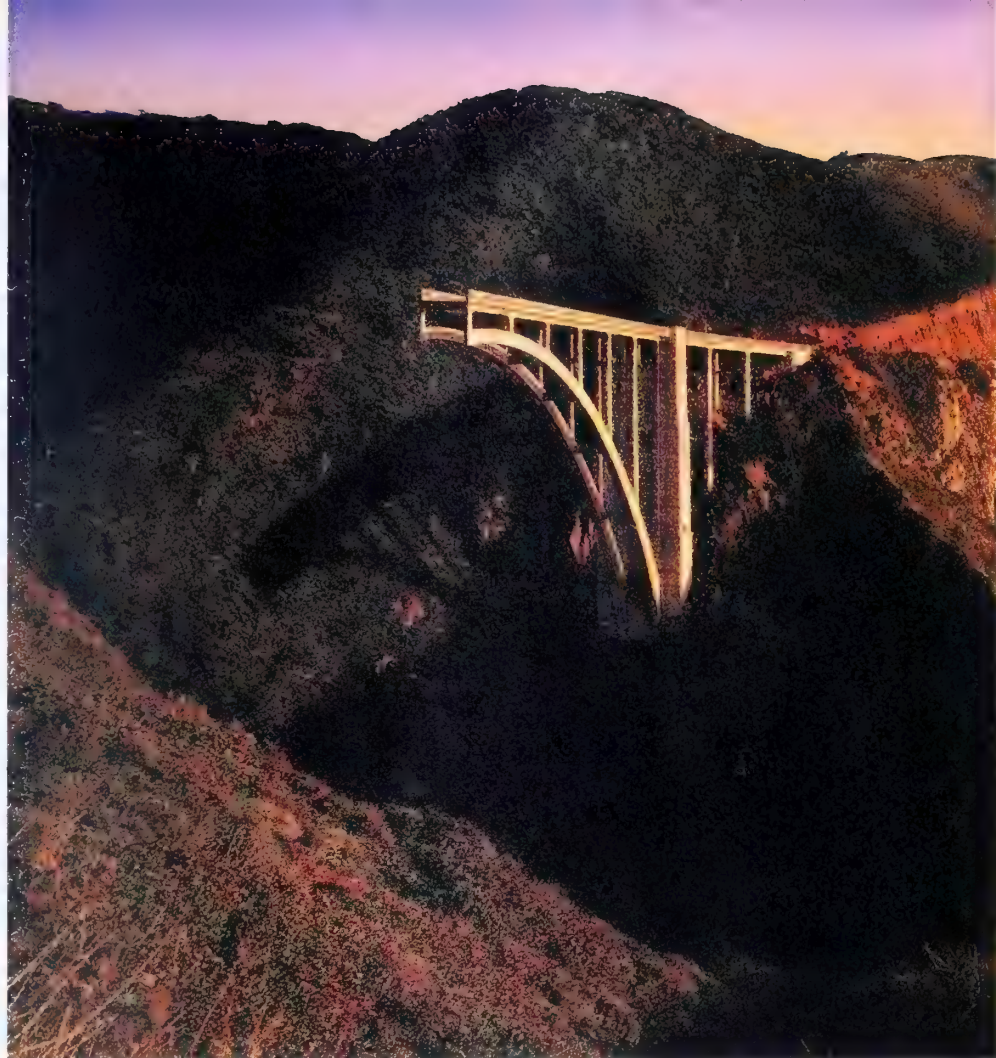
AGE ADVANTAGE. If you know you'll be at least 59½ when your firstborn becomes a freshman, consider a variable annuity, so-called because earnings accrue at a variable rate each year. These allow you to shift funds between equities and other instruments, gradually decreasing

years until matriculation, your savings to date, and a guess at your return on investment. Then, they sell you the investment. But instead of paying fees and commissions, you might just use common sense: Save as much as you can, regularly. The adviser's recommendation might be way beyond your means anyway. If you insist on precise calculations, buy Jane Bryant Quinn's *Making the Most of Your Money* (Simon & Schuster, \$27.50), which has a chapter on college financing. The formula is in there.

As with college financing, saving for retirement should be done by working backward from your goal. Planners estimate that annual retirement expenses will run to about 70% of your final year's sala-

provide barely half of what you'll need to enjoy an approximation of your usual lifestyle after retiring at 65. To cover the rest of your expenditures, you'll need a pool of investments large enough to draw upon for at least 15 years. Baby boomers who start saving now can benefit from that 20- to 30-year stretch before they get a gold watch. It lets you choose vehicles, such as growth stocks, that promise the highest returns over the long term. The long time frame also lets you take full advantage of the compound-interest factor. The sooner you start to invest, the less you need to save each year (table).

Start a retirement plan with an estimate of how much you'll need each year, based



When dental insurers have too many objectives to meet, this is how they meet them.

Delta Dental—the country's leading dental specialist—offers programs designed to meet your financial goals more than just halfway. □ Through safeguards which include fee reviews, dental office audits, dentist-consultant reviews, and post-treatment reviews, the Delta Dental Cost Management Program ensures that you and your employees receive the most thorough and cost-effective coverage obtainable. □ But cost management is only one facet of Delta Dental's unique three-point system. A system that also offers plan design flexibility and 106,000 dental offices in the nation's largest participating network. □ It's a program only Delta Dental offers. That's why we now cover more than 22 million people in 28,000 groups and pay more than \$2 billion a year for dental care. To learn more about how your group can benefit from Delta Dental, call 1-800-441-3434 today.

Δ Delta Dental

America's Leader in Dental Health Plans

duction for an IRA investment, its tax-deferred earnings often can build up faster than alternative tax-free bonds or bond funds.

Realistically, most people don't save money for college and retirement at the same time. You'll probably put most of your savings into retirement accounts until you have children, then stop funding those accounts and concentrate on college until the kids graduate.

But Steven Lee, a commercial airline pilot, and his wife, Karen Platt-Lee, are doing both. The San Diego couple is salting away college money for their three daughters, aged 6, 5, and 15 months. After projecting future college costs, Steve figured they needed to set aside at least \$500 a month. They divide that among three growth-stock funds, one for each child.

THRIFTY FOLKS. Even though Steve should receive pensions from both his airline and the Navy, he's saving for retirement, too. He invests about \$7,800 annually in his company's 401(k) plan. And he and Karen have individual retirement accounts totaling \$31,000.

Steve, 39, and Karen, 42, are both fortunate in having living parents, too. The Platts, who live in a retirement community in nearby Mission Viejo, were thrifty themselves and urged the younger couple to start saving early. But Steve's parents are more vulnerable. He has asked them to consider buying long-term health insurance through Steve's employers. "I'm interested in protecting them in case of catastrophic illness, so they wouldn't have to go on Medicaid," he says.

With many people living well into their 80s and 90s, baby boomers will get to spend more years with their parents than past generations

have. But that blessing has its darker side: If parents become ill or don't have resources, their adult children may have to take care of them. If an infirm parent needs long-term care, the

for help. A growing number of insurers now offer long-term-care policies. And "elder-law" attorneys are talking about preserving assets through "Medicaid estate planning," restructuring assets so that qualifying for

aid involves "spending down" or transferring assets until they are largely gone.

It's little wonder, then, that people are trying to manipulate the system. Many people have lawyers setting up irrevocable trusts, which put assets at arm's length and offer such gambits. One way elderly parents attempt to qualify for Medicaid and preserve assets is by giving children the assets. That may raise uncomfortable issues about who really controls the money.

And some states investigate back a number of years to see if a transfer of assets to children has taken place, and if it has, may disallow state aid.

SHOP AROUND. Another way to plan for nursing home costs is to buy long-term health care insurance. The policies can be costly, so make sure premiums don't rise as you parent gets older. "If you buy between age 55 and 60, the premiums are much less expensive than if you wait," says Victor Ross, a planner with IDS Financial. Ross says a 60-year-old could buy a policy with \$40- to \$60-a-day benefit to be paid indefinitely, for a year cost of about \$400. At 67, the same policy would run \$700-\$800 a year.

Checking out a long-term care policy takes a good bit of work. First, note the financial strength of the insurer, looking at its rating in A.M. Best, Standard & Poor's, Moody's. And make sure that the actual policy you're considering is guaranteed renewable and that it carries no prior-hospitalization requirement. Also, check that there is coverage for home care, cost-of-living benefit to track inflation, and no exclusion for preexisting conditions, such as Alzheimer's.

Caring for your parents can involve a difficult role reversal. But helping them through their old age can help you prepare for the time when you may be in the same boat.

Don Dunn, Joan Warren and Suzanne Woolley, with bureau reports



costs can wipe out assets in no time.

Right now, about 10% of workers have some responsibility for an aging parent. The New York-based Families & Work Institute, a nonprofit

Medicaid doesn't wipe them out.

Fueling all this activity is the obvious fact that as parents live longer, their chances of needing expensive long-term care increase. With nursing-home costs ranging from \$30,000 to \$70,000 a year, it doesn't take long for assets to be depleted. If a parent is fairly healthy but could use some help, say, three days a week, home visits by a registered nurse can top \$10,000 a year. For constant home care, the cost goes through the roof.

Medicare provides little or no relief for nursing-home or home-care costs. Medicaid does cover nursing-home costs, but only if the person going into the home has few or no liquid assets. For many people, qualifying for medic-

IT HELPS TO DEVELOP A FEW 'WHAT IF' SCENARIOS

research institute, expects that proportion to swell to 40% in the next 10 to 15 years. That prospect is causing many boomers to turn to insurance companies, tax attorneys, and financial planners

“Whereas the Benz...feels like a mass-produced car, the Bentley is in a different world. A world of unmatched cabin comfort, beautiful craftsmanship, superb quality materials. There is nothing in the world like a Turbo R.”

Car Magazine, November, 1991

When Car Magazine conducted its search for the best car in the world, they found that the Bentley Turbo R outperformed the cream of the competition. May we add that it's now one of the best automotive investments in



the world, under exceptionally affordable sale and leasing terms being offered on all 1991 Rolls-Royce and Bentley models. For details – and a personal copy of the Car Magazine article – please call 1-313-350-0500.

The Rolls-Royce and Bentley limited edition sale or lease.

© Rolls-Royce Motor Cars Inc., 1992. The names "Rolls-Royce" and "Bentley" and badges are registered trademarks.

Elder Care

HOMES WITH NURSING THAT AREN'T NURSING HOMES

Dr. Bertram D. Thomas and his wife, Glorian, saw the handwriting on the wall. Although she had recovered from a minor stroke, they viewed the illness as a warning of things to come. So in 1975, the former president of Battelle Memorial Institute, a Columbus (Ohio) research center, and his wife moved into a two-bedroom apartment at Casa Dorinda, a continuing-care retirement community (CCRC) in Montecito, Calif.

It turned out to be a wise move. Glorian Thomas suffered a more severe stroke in 1978, and she moved into the community's nursing home—at no extra charge. Her husband says that if they had not been in a CCRC, costs for around-the-clock nursing care for her “would have bankrupted us.” His wife died in 1985, and he, now 88, still lives in their apartment.

SAFE HAVEN. If you're worried that your parents might get into a similar predicament, you might consider CCRCs—a flexible though pricey form of long-term-care insurance. About 250,000 old folks, with an average age of 82, now live in these communities, which offer a range of leisure, residential, and nursing services. In a typical CCRC, you don't buy your home, but you pay a substantial entry charge and a monthly fee. The fees cover nursing care for residents who need it. Those who don't—and those who move out—usually don't get their money back. Participants “are buying something of substance, even if they are not buying real estate,” says Ann E. Gillespie, director of the Continuing Care Accreditation Commission (CCAC).

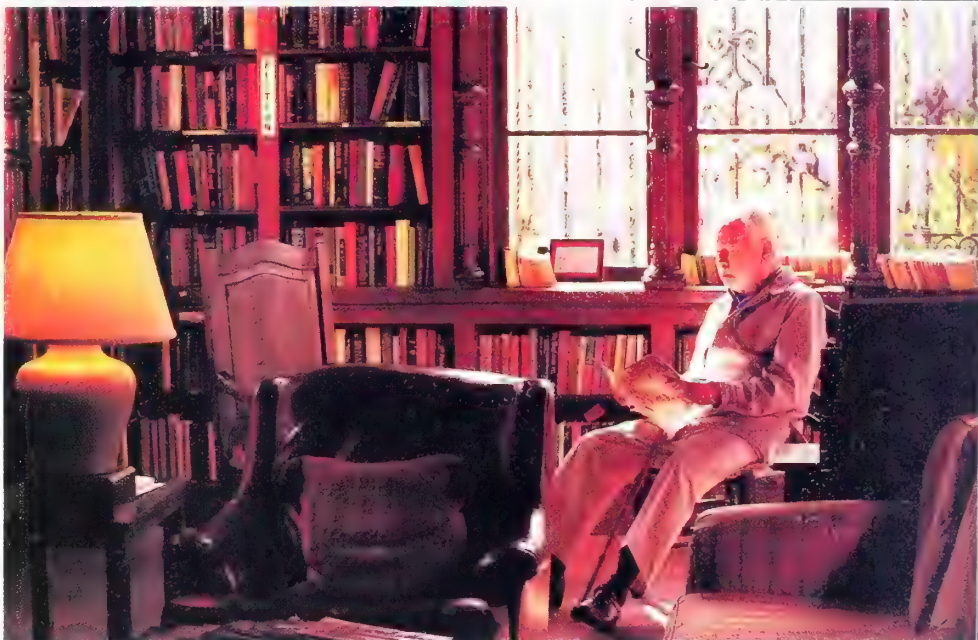
At Casa Dorinda, the entry charge for a two-bedroom unit ranges from \$195,000 to \$250,000, with a monthly fee of \$4,100. That's the high end

of the business, though. With its unlimited nursing care, Casa Dorinda is an “extensive,” or Type A, facility. In this class, the median entry charge for a one-bedroom apartment is \$70,529, plus \$1,145 a month, according to the American Association of Homes for the Aging (AAHA).

but they must pay the full rate. As with nursing homes, Medicare will cover only short-term recuperative care. Residents also may be charged for meals. The median price: \$41,766 upon entry and then \$766 a month. “Choosing among plans depends on how much of a risk-taker you are,” says Susan Polniaszek, director of national services for the United Seniors Health Cooperative in Washington, D.C. That's because you're betting on how much medical care will be needed.

has accredited 111 of the 7 CCRCs in the U.S. For list, send a self-addressed stamped envelope to the CCRC at 901 E St. N.W., Washington, D.C. 20004-2837.

FINE PRINT. Ask a lawyer to review the contract. Before you sign, make sure you know under what circumstances the monthly fees can rise. Also find out if there are any refunds if your parents move or never need long-term care. And ask what happens to the fees—and the apartment—if one parent is moved to the health center.



IN CASA DORINDA'S LIBRARY: AT CONTINUING-CARE COMMUNITIES, WHICH OFFER LEISURE AND NURSING SERVICES, RESIDENTS BUY “SOMETHING OF SUBSTANCE, EVEN IF THEY'RE NOT BUYING REAL ESTATE”

A “modified,” or Type B, plan provides a specified level of long-term care—say, 60 days a year—as part of the package. After that, residents pay \$50 to \$150 a day for care. The median entry charge is \$50,830, and the monthly fee is \$948.

With Type C, or “fee-for-service,” plans, residents have access to nursing facilities,

It's hard to predict your parents' illnesses, of course. But there are other factors that can help you make a decision. First, make sure the family can pay the monthly fees for as long as your parents live. Also, investigate the community's financial stability. A CCRC in operation for more than a year should have a reserve account to pay future nursing costs. If it's a new venture, ask about the owners, and check the outfit's most recent audited financial statement.

In addition, look for a seal of approval from the AAHA's accreditation commission. Since it began operations four years ago, the commission

If one of your parents needs help in dressing or bathing but does not want to move to a nursing home, assisted living may be the answer. Generally, in such arrangements, 10 people live in a house with staff members who serve meals, plan activities, and help the disabled. Monthly fees range from several hundred dollars to more than \$2,000. Nursing care is sometimes included.

As the number of elderly people continues to rise, the options are sure to grow. That increases the chances your parents will face the retirement years more securely, whether in sickness or health.

Susan Garlin

**UP-FRONT COSTS
RUN FROM \$40,000
ALL THE WAY
TO \$250,000**



By now, your office workflow problems should be a thing *of* the past, not *from* the past.

Since the dawn of civilization, people have been passing information everything from stone tablets to roll parchments. Fortunately, we've come a long way from the days of routing stone tablets. But even modern carrier carries with it many of the same intrinsic processing problems as stones.

Today there is a solution... it's called the FileNet® WorkFlo® Business System. With WorkFlo, digitized document images replace paper and your personal computer becomes an

extension of your desktop, integrating mainframe data, PC applications, and images into the work process.

WorkFlo automatically links, prioritizes, and manages the storage, retrieval, processing, display, communication, printing, and routing of all the information required to process your work.

Put FileNet to work for you. Our installed base of more than 500 systems in production applications in 18 industries underscores why imaging is

one of the most strategic technologies of the '90s. Call Ray Brown at (714) 966-3900 or write FileNet Corporation, 3565 Harbor Boulevard, Costa Mesa, CA 92626 for a free 16-page brochure on "Integrating Your Information Resources."



FileNet®
The WorkFlo Company

FOR VOYAGES THAT CAPTURE THE IMAGINATION.

.....



DISCOVER A CRUISE SHIP LIKE NO OTHER ON THE SEAS. THE SSC RADISSON DIAMOND. WITH HER UNIQUE TWIN-HULL DESIGN AND UNMATCHED COMFORTS, SHE'S QUITE ASSUREDLY UNLIKE ANYTHING YOU HAVE EVER EXPERIENCED. A MASTERFUL BLEND OF IMAGINATIVE FORM AND INNOVATIVE FUNCTION, THE SSC RADISSON DIAMOND PROMISES A CRUISING EXPERIENCE FAR BEYOND THE EXPECTED.

THIS SPRING, HER INAUGURAL SEASON, SHE GRACES THE EXOTIC PORTS OF THE MEDITERRANEAN BEFORE LEAVING FOR THE CARIBBEAN ON A THRILLING QUEST OF CLASSIC PROPORTIONS. SO COME ABOARD THIS SPRING AND JOIN THE COMPANY OF FELLOW ADVENTURERS. THOSE DESTINED TO HAIL THE FUTURE OF OCEAN TRAVEL WITH A VOYAGE THAT CAPTURES THE IMAGINATION.



**SSC RADISSON DIAMOND
DIAMOND CRUISE**

FOR ITINERARIES AND INFORMATION,
CONTACT YOUR TRAVEL AGENT OR CALL 800 333-3333

SHIP'S REGISTRY: FINLAND • OWNED BY DIAMOND CRUISE LTD. • MANAGED BY RADISSON HOTELS INTERNATIONAL

Index to Companies

Index gives the starting page for a story or feature with a significant reference to a company. Most companies are indexed under their own names. Companies listed only in tables are not included.

2, 142
e 44
38, 146
6
Insurance 44
Airlines 44
Continental 120
Heritage Fund 56
Home Products 124
Income Partners 165
146
Acoustics 140
Petroleum 74
International 52
118, 142, 170
Search 140
a 50
2
Gas & Electric 142
rust 164, 165
omb 132
rms 56
Sandler 165
tic 142
42, 144
s & Blue Shield 62
up 146
er 165
n & Hamilton 124
ers Squibb 38, 124, 142
Farms 134
68
r 36, 40, 42, 186
Inhabitation 38
Banking 38, 164
52
42, 134
Lwright 124
y 132
2
Business Credit 164
38, 120
175
142, 146, 186
ound 44
Pictures 37, 146
35
Financial 164
al Airlines 165, 186
arel Old Country
puter 34
arch 33, 34
Engine 38, 60
emiconductor 40
s 186
44
33
6
ines 52
ison 142, 144
Bank 56
quipment 53

Danlar 74
Drexel Burnham Lambert 165
DRI/McGraw-Hill 22
Dun & Bradstreet 27
Du Pont 35, 124
E
Eastman Kodak 50, 142
Ecological Chemical Products 35
Edizione Holding 50
Electromation 60
Ernst & Young 52
Ethicon 124
Excel Hi-Fi 140
Exxon 52
F
Fakel Enterprise 68
Federal Express 165
Finsiel 53
First Boston 33
Fluid Data 74
Ford 50, 60
G
GE 44, 164
General Atomics 68
General Dynamics 49
General Mills 142
Germany Fund 56
Gillette 38
GKR International 142
GM 30, 142, 170, 175
Golden Technologies 35
Goldman Sachs 22, 38
Goldome 40
Goodrich (B F) 142
Grant Thornton 7
Greyhound 186
Groupe Bull 53
Grumman 142
GTE 44
Gulfstream Aerospace 134
H
Harbor Capital Management 38
Heinz (H.J.) 7, 142, 144
Hershey Foods 165
Hewlett-Packard 30, 33, 53
Hilton 38
Honeywell 38
Hudson Street Partners 175
Humana 142
Huntton & Williams 146
Hyatt 165
Hyundai 55
I
IBM 30, 38, 40, 124, 140, 142, 175
Integrated Resources 165
International Telecharge 118
ISA Consultants 30
ITT 142
J
Janssen Pharmaceutica 124
Jefferson-Pilot 142
John L. Warham & Son 146
Johnson & Johnson 124, 132
Johnson & Johnson Consumer Products 124
Jones Day Reavis & Pogue 120
K
Kaye Scholer Fierman Hays & Handler 120
Kelllogg 142

Kidder Peabody 38
Kmart 124
Knight-Ridder 38
Kodak do Brasil 50
Komatsu 36, 186
Krell 140
Kubota 33
L
Learjet 165
Liberty Mutual Insurance 62
Lipper Analytical Securities 56
Loral 68
LTV 60
M
Macy (R H) 164
Madrigal Audio 140
Maltaria Pampa 50
Marantz 140
Marvel Entertainment Group 40, 56
Matsushita 140
McCaw Cellular 44
McDonald's 40
McGraw-Hill 28
MCI 170
McNeil Consumer Products 124
McNeil Pharmaceutical 124
Medco Containment Services 142
Merck 124
Merrill Lynch 22, 142
Metropolitan Life 62
Microsoft 33
Miller Brewing 170
MIPS Computers Systems 30
Mitsubishi Motors 74
MMS International 28
Mobil 40, 52
Mondadori 53
Monsanto 50
Monsanto do Brasil 50
Montgomery Securities 34
Morgan Stanley 30, 142
Motorola 60
N
National Medical Enterprises 142
National Patent Development 68
National Telephone Services 118
NationsBank 38
NBC 175
NEC 53
New Line Cinema 37
NFL 170
Northwest Airlines 52
NTN Communications 170
O
Oaktown Stable 134
Olivetti 53
Orion Pictures 37
Ortho Pharmaceutical 124
P
Pan Am 164
Panhandle Eastern 38
Paramount Pictures 37
PASA Petroquimica 50
Patriotic Construction Stock Brokerage 68
Pennzoil 146
PepsiCo 40, 129, 124
Personal Products 124
Philip Morris 38, 56, 142, 146
Philips 30
Phillips Petroleum 142
PNC Financial 124
Potlatch 38
PPG Industries 142
Prime Computer 30
Primerica 142, 146
Procter & Gamble 124
Prudential 62
Prudential Securities 38

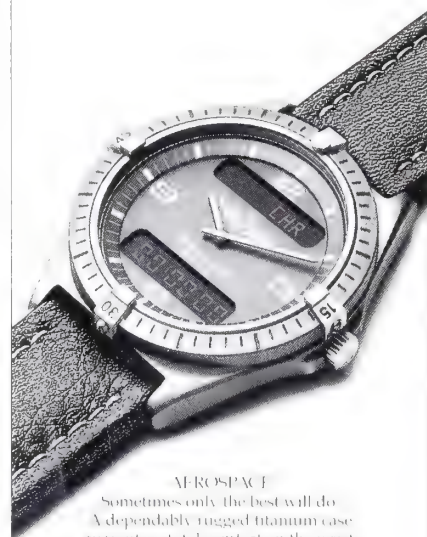
R
Ralston Purina 142
Reebok 142
Regal Group 175
Republic Pictures 37
Revlon 40
RJR Nabisco 56, 142
Rothschild 37
S
Saatchi & Saatchi 175
Sadia Concordia Industria e Comercio 50
Salomon Brothers 22
Samsung 140
Sanford C. Bernstein 132
Savoy Pictures Entertainment 37
Schering-Plough 124
Schmeidler (A.R.) 170
Scott 140
Sears Roebuck 44
Security Pacific Bank 118
Siemens 53
Skadden, Arps, Slate, Meagher & Flom 146
SmithKline Beecham 124
Sony 140
Southland 164
SpencerStuart 146
Sprint 170
Standard & Poor's 44, 142
Steinhardt Management 165
Storage Technology 38
Sun Microsystems 30, 33, 68
T
Tandem Computers 30
Telesphere Communications 118
Texas Instruments 142, 144
The Limited 40
Thiel 140
3M 140
TIE/Communications 165
TIG Productions 37
Tony's Auto Service 42
Travelers 62
Tri-Star Pictures 37
TWA 44, 165
U
UAL 142
Unisys 30
United Airlines 52
United Technologies 68
Universe Life Insurance 62
USAir 44, 165
U S Surgical 124, 142
V
Valley Bancorporation 146
Vandersteen Audio 140
Vistakon 132
Volkswagen 50
Vault Information Sciences 50
Valvo 175
W
Wadia 140
Wal-Mart 124
Walt Disney 142
Wang Laboratories 30
Waste Management 146
Wells Fargo 38
Westinghouse Electric 52, 142
Whitman Heffernan Rhein 164
William M. Mercer 142
Williams 118
Winstar 168
X
Xerox 165
Z
Zacks Investment Research 38
Zale 164



BREITLING

1884

INSTRUMENTS
FOR PROFESSIONALS



AFROSPACE

Sometimes only the best will do. A dependably rugged titanium case guarantees total comfort on the wrist. Oversized watch hands provide instant, reliable legibility. A single manipulation unlocks all its digital functions. Chronograph, Timer, Alarm and Second Timezone. This instrument watch is water-resistant down to 100 meters.



OFFICIAL CHRONOGRAPH



TRADITIONAL JEWELERS

Fashion Island
Newport Beach, California 92660
Tel: (714) 760-8035 • 1-800-766-8035

DEWAR'S PROFILE

Denys Cowan

HOME:
New York, N.Y. "Unlike most people here, I've lived in Gotham City all my life."

AGE: 31.

PROFESSION:
Graphic/comic book artist,
DC Comics.

HOBBY:
"I have more fun than anyone has a right to. A hobby would just be rubbing it in."

LAST BOOK READ:
Robert Graves, *The Greek Myths*.
"They were the original super-heroes."

LATEST ACCOMPLISHMENT:
Drew the 50th anniversary edition of
BATMAN. "It's like being a part
of history."

WHY DO WHAT YOU DO?
"If you could live your dream AND
draw your fantasies, wouldn't you?"

QUOTE:
ZAP! POW!!! 96%***SD*SC&T

PROFILE:
Soft-spoken, imaginative, dedicated.
Works well in confined spaces.

HIS SCOTCH:
Dewar's "White Label," on the rocks.
"Doing an issue of *The Question* is
fun, but it's still one frame at a time.
Which means when I finish, a
Dewar's is definitely the answer."

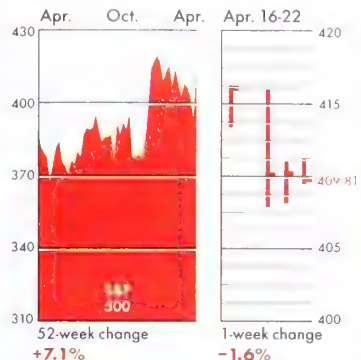


Investment Figures of the Week

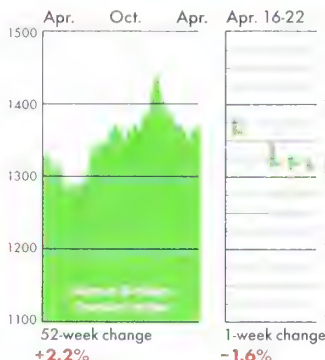
MARKET COMMENTARY

Encouraging week in the financial markets. The Dow Jones industrial average fell 30 points on April 21. Investors expressed dismay at sluggish corporate earnings and gloomy prospects for economic growth. Meanwhile, the yield on 30-year Treasury bonds rose above 8%, in reaction to that housing starts in March that were at a higher rate than expected. Encouraging first-quarter earnings reports—notably Wells Fargo & Co.'s impressive performance—sent stock prices higher on April 21.

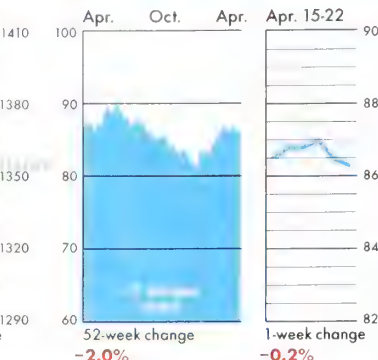
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change	
		Week	52-week
DOW JONES INDUSTRIAL AVERAGE	3338.8	-0.4	13.2
COMPANIES (Russell 1000)	216.4	-1.7	8.3
COMPANIES (Russell 2000)	195.0	-2.3	11.4
COMPANIES (Russell 3000)	230.5	-1.7	8.5

SIGN STOCKS	Latest	% change (local currency)	
		Week	52-week
DOW JONES (FINANCIAL TIMES 100)	2607.8	-1.2	4.8
NIKKEI INDEX	16,839.1	-6.2	-36.0
TSE COMPOSITE	3367.8	-1.3	-3.9

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.78%	3.70%	5.8%
30-YEAR TREASURY BOND YIELD	8.04%	7.88%	8.2%
S&P 500 DIVIDEND YIELD	3.10%	3.08%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.1	25.5	18.1

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	402.2	401.3	Positive
Stocks above 26-week moving average	51.3%	55.1%	Negative
Speculative sentiment: Put/call ratio	0.42	0.42	Positive
Insider sentiment: Vickers sell/buy ratio	2.39	2.79	Neutral

INDUSTRY GROUPS

WEEK LEADERS	% change		Strongest stock in group	% change		Price
	4-week	52-week		4-week	52-week	
ALUMINUM AND GLASS CONTAINERS	9.5	34.1	CROWN CORK & SEAL	14.9	35.8	100 1/2
TRUCKS	8.3	17.3	GENERAL MOTORS	10.0	8.6	42 1/2
INTERNATIONAL OIL	5.2	-6.0	EXXON	7.0	-1.7	59 1/8
MINING	5.1	3.3	ALCOA	8.0	13.0	76 1/8
BROADCASTING	4.8	1.8	CBS	13.4	16.3	188 1/4

WEEK LAGGARDS	% change		Weakest stock in group	% change		Price
	4-week	52-week		4-week	52-week	
CONSTRUCTION	-18.4	21.5	PHM	-25.9	24.8	20 3/4
TRUCKING FIRMS	-16.1	13.7	PAINWEBBER GROUP	-20.0	21.2	19 1/2
SPECIALTY APPAREL RETAILERS	-14.0	-0.2	LIMITED	-21.6	-21.3	23 1/8
MANUFACTURED HOUSING	-13.7	17.4	FLEETWOOD ENTERPRISES	-16.6	21.8	37 3/4
AIRLINES	-13.7	-10.2	USAIR GROUP	-25.5	-31.8	13 1/8

MUTUAL FUNDS

LEADERS		LAGGARDS	
Week total return	%	Four-week total return	%
AMERICAN STRATEGIC EUROPEAN	6.0	OPPENHEIMER GLOBAL BIO-TECH	-19.8
UNITED KINGDOM SMALL COMPANY	5.9	FIDELITY SELECT BIOTECHNOLOGY	-14.3
EUROPEAN PLUS	5.7	HARBOR GROWTH	-12.8

Week total return	%	52-week total return	%
FIDELITY SELECT AUTOMOTIVE	51.7	DFA JAPANESE SMALL COMPANY	-33.3
EDMUNDSON REGIONAL BANK B	49.4	STRATEGIC GOLD/MINERALS	-33.0
FIDELITY SELECT REGIONAL BANKS	48.1	NIKKO JAPAN TILT	-32.9

S&P 500

4-week total return

Index	4-week total return (%)
S&P 500	1.5
Average fund	0.5

Average fund

52-week total return

Index	52-week total return (%)
S&P 500	-5
Average fund	-2

RELATIVE PORTFOLIOS

Amounts sent the present of \$10,000 one year ago	Treasury bonds	U. S. stocks	Money market fund	Gold	Foreign stocks
Stages indicate total returns	\$11,088 -1.94%	\$11,027 +1.03%	\$10,438 +0.07%	\$9,484 -1.14%	\$9,482 -0.62%

on this page are as of market close Wednesday, Apr. 22, 1992, unless otherwise indicated. groups include S&P 500 companies only; performance and share prices are as of market close

Apr. 21. Mutual fund returns are as of Apr. 17. Relative portfolios are valued as of Apr. 21. A more detailed explanation of this page is available on request

CEO PAY: COKE SENDS THE WRONG MESSAGE

There is no doubt that Coca-Cola Co., when measured by total shareholder returns, has been a remarkable winner during the 11-year tenure of Roberto C. Goizueta as chief executive. Since he became CEO in March, 1981, Coke shareholders have racked up combined price appreciation and dividends that yielded a compounded 31.7% a year. Of the 300 companies with the largest equity capitalization, only 5% of CEOs outdelivered Goizueta (page 142).

Even so, an item in the text of Coke's annual report for 1991 raises an important question about compensation of CEOs who produce outstanding results—and whose rewards rightly set a standard for other companies. Goizueta was awarded 1 million shares of restricted stock. The question: Even though performance is at the highest level, can compensation be too high?

The stock, worth \$59.5 million at the time and \$81 million at today's stock price, is part of a package that includes a salary of more than \$1 million, deferred compensation of \$180,000, and a bonus of \$1.9 million. The year before, in 1990, the Coke compensation committee granted the CEO 500,000 free shares, now worth \$40.5 million. In 1988, Goizueta received the equivalent of 400,000 shares, now worth \$32.4 million. During the 1984-86 period, the committee granted him 900,000 shares, bolstered by an agreement to pay his federal and state income taxes on the stock upon retirement that adds 35% to the value of the grants, making them worth \$98.4 million at current prices. To paraphrase the late Senator Everett M. Dirksen, eventually numbers like this add up to real money.

Beyond the sheer size of Goizueta's pay, there are other broad issues. The chairman of Coke's compensation committee is Herbert Allen, whose investment banking firm has received almost \$24 million in fees from Coke-related deals. Allen may be a wise choice as a director, but his key role in setting Goizueta's pay suggests a conflict of interest. Finally, Goizueta is hardly the only one responsible for Coke's success—yet he is the only one so disproportionately rewarded. Why pretend Coke is a one-man band? Yes, CEO performance counts. But it isn't the only thing. In all, Coke has sent the wrong message about executive pay.

HOW TO STRIKE A BALANCE WHEN WORKERS STRIKE

The threat of permanent replacements is a dynamite tactic to break a strike, as recent events in Peoria show (page 36). But there is still the question of whether the tactic is valid in labor relations. We believe the United Auto Workers was wrong to insist that Caterpillar Inc. settle on the same terms Deere & Co. granted last year. The two are quite different: Cat, which exports 60% of its U.S. production, barely competes against Deere, which is largely

a domestic company. Cat's main rival is Japan's Komatsu Ltd.

Yet the specifics of this dispute shouldn't obscure the larger significance of what happened. Permanent replacements have been used with increasing regularity recently most often by companies on the verge of collapse: Continental Airlines, Greyhound, the *Daily News*, Eastern Air Lines. But Caterpillar, by contrast, is profitable. And the UAW may be the country's strongest remaining union. That the company's mere threat caused the union to crumble means that other healthy companies are likely to follow Cat's lead.

The issue will soon be before Congress, which is due to consider a labor-backed bill that would ban permanent replacements. We think a ban would be a mistake. The tempo of the times suggests a compromise between fairness to striking workers and the reality of global competition. Any legislation should continue to permit a company to hire temporary replacements. If a strike lasts six months and an impartial mediator declares an impasse, then the temporary workers could become permanent replacements. That would allow time for bargaining before the threat of permanent replacement becomes a reality.

HIRING IN SOUTH AFRICA: TAKE THE HIGH ROAD

The U.S. companies that are preparing to reestablish their presence in South Africa are in a strong position to show the way in the political and social upheaval ahead. President F.W. de Klerk's referendum victory on Mar. 17 gives him a mandate to negotiate power-sharing with groups representing the black majority in an interim government. That, in turn, will open the way for constitutional reform. If successful, the new charter will guarantee the rights of whites and other minorities in a political system that the blacks will inevitably dominate. When that happens, U.S. cities and states should end the sanctions they have imposed to discourage U.S. corporate investment in South Africa.

The businesses most likely to survive and prosper in this transition are those that help South Africa by creating jobs and opportunities for advancement by qualified black Americans. Companies that have long-term experience with multiracial work forces can help set the pace, many South Africans say, by applying their management knowhow in hiring, training, and promoting blacks in South Africa. U.S. companies should also seek out black entrepreneurs as dealers and partners in starting new businesses.

As political power shifts, employers in South Africa may well face growing pressure for job quotas as a way of undoing the unjust legacy of apartheid. To forestall calls for quotas, it is urgent for companies with good records in integrating their American work forces to move swiftly to the same goal in South Africa. Such a track record will give them moral authority as well as management experience to help strike the difficult balance between reverse discrimination and the creation of legitimate job opportunities for all South Africans.



Getting ahead of schedule

Anyone who travels on business knows how hard it can be. Which is why we've made getting AT&T so easy. Even at public phones

isn't always easy.

that aren't automatically connected to AT&T.

If you're calling long distance and you don't hear "AT&T" after the bong, simply hang up.

Getting AT&T is.

Dial 10+ATT+0 (it's right on the back of your AT&T Card). You'll be assured of the service you depend on, at the prices you expect.

Dial 10+ATT+0

plus the area code and number.



We Like To Think The World But Actually, It's Th



While the world may not have been created expressly for Jeep Grand Cherokee Limited, our engineers designed this revolutionary new 4x4 as if it was. They gave the New Jeep the power, strength, and cap-

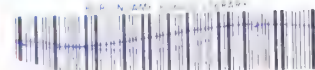
ability to take on some of the world's most challenging terrain.

At the heart of the New Jeep is Quadra-Trac,* an all-new all-the-time four-wheel drive system that automatically adjusts itself to changing road conditions.

A mighty 190 horsepower engine delivers a world power. And a new Quadra suspension system improves on-road ride and handling as well as off-road capability.

And because Jeep has

*Quadra-Trac optional on Grand Cherokee Base and Laredo models. Chrysler's Owner's Choice Protection Plan includes 7 year/70,000 mile powertrain protection or 3 year/36,000 mile bumper-to-bumper.



03330450 9

BusinessWeek

Y 11, 1992

A MCGRAW-HILL PUBLICATION

\$2.75

GROWTH VS. ENVIRONMENT

The Push For Sustainable Development

In Rio next month, world leaders will seek a route to prosperity without environmental degradation.



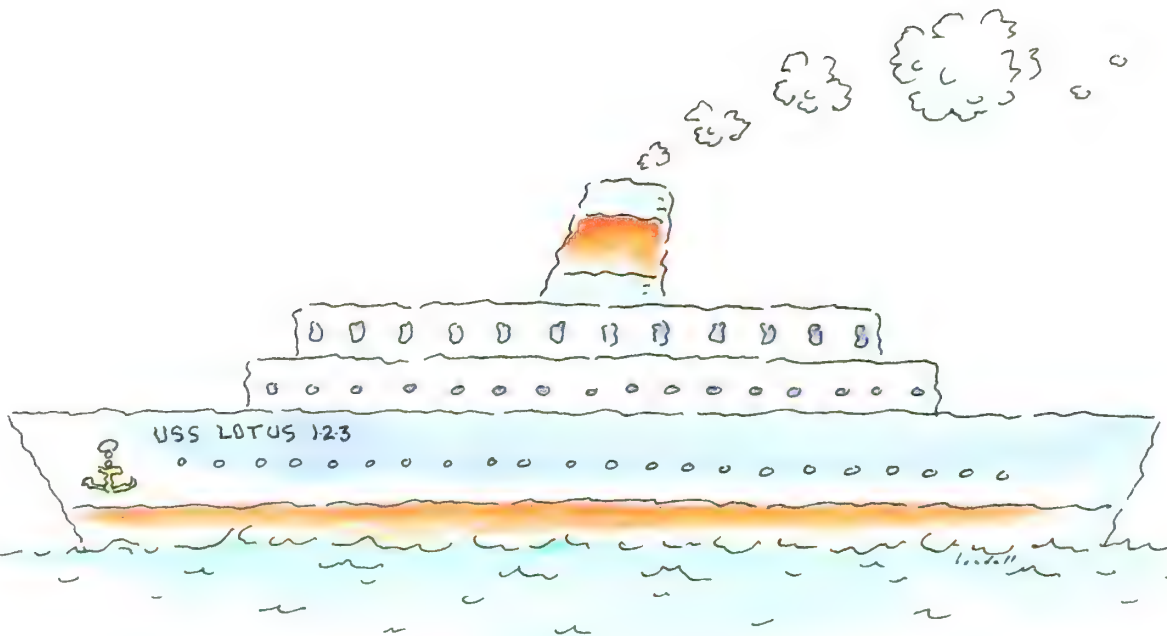
It's called "sustainable development." The concept is certain to generate plenty of controversy.

PAGE 66

94010 *****5-DIGIT
0602 105811160 DEC92 T36 2666
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA
94010-4083

APR 29 1992
LIBRARY

Saying bon voyage to
your old spreadsheet is
easier than you think.





Introducing Microsoft Excel 4.0 for Windows, the spreadsheet worth switching for.

Someday soon, you'll probably be making a decision about a new spreadsheet.

And that will probably mean a spreadsheet for Windows.*

When that day comes, we hope you'll explore a little before shoving

off in the same old boat you're in now.

You won't have to look very far to discover new Microsoft® Excel 4.0 for Windows. It's the spreadsheet that makes your everyday spreadsheet tasks – not to mention more complex things – amazingly easy.

Just how easy?

Try one-step just-about-everything. For example, Autosum™ instantly totals rows or columns with a click-click of your mouse.

Autoformat lets you apply one of 14 professionally designed, sharp-looking formats to your worksheet with another click of your mouse.

They're both part of our customizable Toolbar, which also has a number of other handy features, such as a Spelling Checker and instant charting.



Using your 1-2-3 files, your own macros and familiar commands in Microsoft Excel 4.0 for Windows is no problem.

Then there are the Wizards, which are step by step guides to various features. Everything's designed to help you get your day-to-day number-crunching done with the greatest of ease.

But how easy is it to switch?

First of all, naturally you can bring all of your existing 1-2-3® work with you, because Microsoft Excel reads and writes all your 1-2-3 files, and runs your 1-2-3 macros – unmodified. So your investment with Lotus® is safe.

What's more, Microsoft Excel lets you learn using what you already know. With Help for Lotus 1-2-3 users, when

you enter your familiar 1-2-3 commands, Microsoft Excel 4.0 for Windows shows you the corresponding command.

(By the way, we're the only spreadsheet for Windows that offers this easy way to learn. Surprised?)

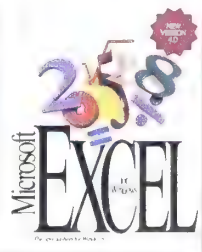
Finally, if you're using Lotus 1-2-3 or Borland®

Quattro® Pro, you can upgrade to new Microsoft Excel 4.0 for

Windows for \$129.* (There's even a 90-day money-back guarantee.**)

But there's much more to Microsoft Excel 4.0 for Windows than we can tell you about here. We recommend asking for a demo at your local software reseller's. Or just give us a call at (800) 323-3577, Department Y29, to find out more or to order your copy.

Before you know it, you could find yourself giving your old spreadsheet the old heave-ho.



The spreadsheet for Windows.

Microsoft
Making it easier



THE OZONE LAYER IS THINNING, AND 25 BILLION TONS OF TOPSOIL ARE LOST EACH YEAR. ARE WE ALREADY OVERSHOOTING EARTH'S LIMITS?

Cover Story

66 GROWTH VS. ENVIRONMENT

Left unchecked, world population will double by 2030. Just providing the basics would mean quintupling world output. But the old industrial ways mean ecological catastrophe. Future prosperity depends on 'sustainable development'—balancing growth with nature's ability to renew itself. And that may require a new global compact between rich and poor nations

71 THE ROAD TO RIO

Plenty of good intentions on the agenda, but...

74 WASTE NOT, WANT NOT

The next trick for business: Copying Mother Nature's efficiency

Top of the News

32 TOXIC SUPERFUND

Industry and environmentalists agree that the cleanup plan is a mess

33 BIG OIL'S RECYCLING ACT

Critics charge that it does more harm than good

34 UNMARKED PROXIES

Irate shareholders' new tactic: Abstaining in board elections

36 PLUNGE OF THE PRICE SLASHERS

Unconvinced of recovery, many companies go on cutting prices

37 ON A TEAR AT GM

Three weeks after becoming COO, Jack Smith has made major changes

38 CAN THESE GUYS REVIVE MACY'S?

The heat is on its new co-CEOs

40 QUICK CHANGE AT MAGELLAN

Morris Smith, we hardly knew ye

42 THE USW VS. MARC RICH

How it crimped his expansion plans

44 COLLEGE BOUND IN A BIND

The SEC files fraud charges

46 IN BUSINESS THIS WEEK

Back to Vietnam, Irwin Jacobs, an art maven's arrest, going metric, a setback for the F-22, biotech grub

International Business

52 GERMANY

Rising inflation, high interest rates, and government borrowing are unraveling the economy

53 BRITAIN

Hostile bids, forced resignations, slashed jobs: Whatever happened to genteel London banking?

54 BRAZIL

BUSINESS WEEK talks with President Fernando Collor

57 INTERNATIONAL OUTLOOK

Despite a brand-new governor, Hong Kong's hopes for democracy are dwindling fast

Economic Analysis

16 ECONOMIC VIEWPOINT

Kuttner: The problem isn't savings, it's the way we invest them

20 ECONOMIC TRENDS

Productivity and recovery, mortgage interest deductions, consumers' doubts about Bush, big-ticket buyers



34 THE SILENT TREATMENT:
ANGRY INVESTORS HAVE FOUND A
NEW WAY TO SEND CORPORATIONS
A MESSAGE—WITHHOLDING THEIR
VOTES IN BOARD ELECTIONS



80 HOW MUCH IS THIS BUILDING WORTH?
SHAREHOLDER LAWSUITS ALLEGE
THAT WESTINGHOUSE CREDIT CORP.
INFLATED REAL ESTATE VALUES TO
AVOID BIG WRITE-DOWNS



76 THE WORLD BANK'S GLOBAL GADFLY:
WHEN CHIEF ECONOMIST LARRY
SUMMERS WANTS TO MAKE A POINT,
THE ICONOCLASTIC LIBERAL DOESN'T
CARE WHO TAKES OFFENSE

29 BUSINESS OUTLOOK
The latest signs say this recovery
has staying power

76 AN IN-YOUR-FACE ECONOMIST
The World Bank's Larry Summers is
no stranger to controversy—and
that's fine with him

Government

49 WASHINGTON OUTLOOK
A fleeting victory for conservative
Democrats?

Legal Affairs

58 SKIRTING THE HIGH COURT
With the U. S. Supreme Court deaf
to their pleas, advocacy groups are
turning more to state constitutions

The Corporation

78 NO ALL-CLEAR FOR BOEING
The company looks strong, but
there's still foul weather ahead

80 REAL ESTATE RUCKUS
Did Westinghouse Credit Corp. use
questionable assessments?

Finance

84 WITH FRIENDS LIKE THIS...
Ex-allies Leon Black and Carl Icahn
may be headed for a court battle
over a high-stakes bankruptcy

88 LANDFILL LEGERDEMAIN
The garbage industry is playing fast
and loose with accounting guidelines

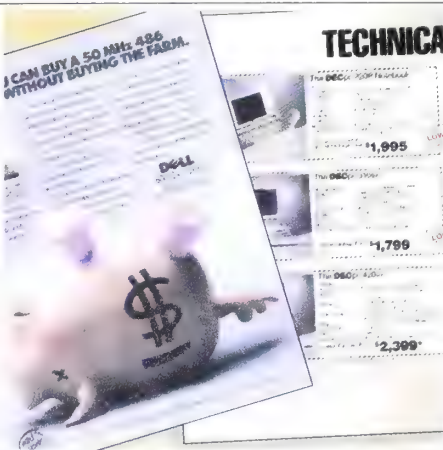
89 GREAT WESTERN'S LASSO
The savings and loan is roping in
rivals and banking on an upturn in
real estate

92 INSIDE WALL STREET
A spin-off that's a 'screaming buy'?
Saatchi: It's still creating sparks
Buy one, get one free

119 INVESTMENT FIGURES OF THE WEEK

Information Processing

93 THE BOOM IN MAIL-ORDER PCs
More and more computer buyers are
skipping visits to the showrooms and
letting their fingers do the work



93 THE PC IS IN THE MAIL:
A MEGABYTE BUSINESS BOOM IN
MAIL-ORDER MACHINES HAS STIRRED
INTEREST EVEN AMONG THE MAJOR
COMPUTER MANUFACTURERS

96 PRAIRIE FIRE
South Dakota's Gateway 2000 is
No. 1 in mail-order PCs

Science & Technology

101 DEVELOPMENTS TO WATCH
'Smart glass,' German industrial
policy, buckyballs, TV-watching
made simpler, a computerized tailor

People

102 GERRY TSAI IS BACK
The onetime Wall Street whiz kid is
betting on a Memphis insurer

Personal Business

112 FINANCES: Lower-rate credit cards
TRAVEL: Downhill skiing in Chile
SMART MONEY: Profits on paper
SOFTWARE: Educational PC games

Features

4 BUSINESS WEEK INDEX

5 READERS REPORT

12 BOOKS

Anders: *Merchants of Debt: KKR and
the Mortgaging of American
Business*
Galbraith: *The Culture of
Contentment*

117 INDEX TO COMPANIES

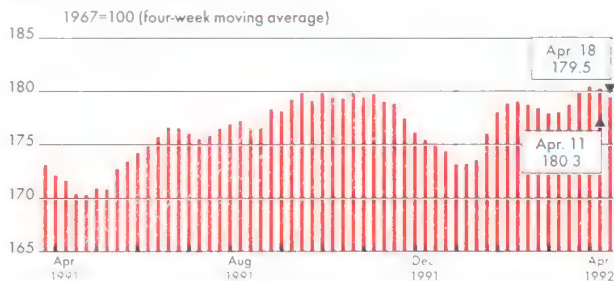
120 EDITORIALS

Fly down to Rio, Mr. Bush
Stick to your guns, Herr Kohl

BusinessWeek Index

PRODUCTION

Change from last week: -0.4%
Change from last year: 5.3%

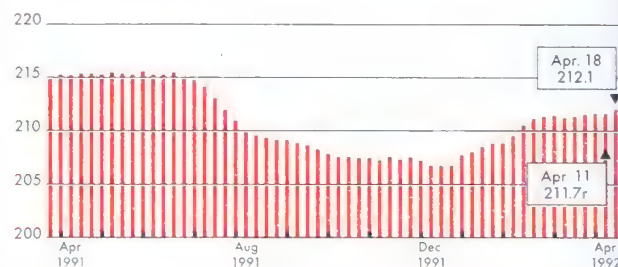


The production index declined during the Easter-holiday week ended Apr. 18. On a seasonally adjusted basis, output of lumber, autos, and trucks was down sharply, and coal and rail-freight traffic decreased as well. Electric power, paper, and steel production increased. Crude-oil refining and paperboard production were unchanged from the previous week. Before calculation of the four-week moving average, the index dropped to 177.8, from 179.1.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.2%
Change from last year: -1.5%



The leading index increased for the week ended Apr. 18, as almost all of the indicators showed better signs of the economy's future growth. Higher stock prices, slightly lower bond yields, fewer new-business failures, and improved growth rates in materials prices and real estate loans all contributed to the gain. Growth in M2 was flat. Before calculation of the four-week moving average, the index rose to 213, from 212 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/25) thous. of net tons	1,827	1,810#	11.0
AUTOS (4/25) units	109,130	104,179r#	-3.6
TRUCKS (4/25) units	74,325	71,570r#	-3.8
ELECTRIC POWER (4/25) millions of kilowatt-hours	50,969	51,328#	0.9
CRUDE-OIL REFINING (4/25) thous. of bbl./day	13,420	13,248#	2.8
COAL (4/18) thous. of net tons	18,337#	18,626	4.7
PAPERBOARD (4/18) thous. of tons	800.8#	811.1r	9.6
PAPER (4/18) thous. of tons	781.0#	766.0r	5.0
LUMBER (4/18) millions of ft.	502.9#	504.3	-0.8
RAIL FREIGHT (4/18) billions of ton-miles	19.7#	20.6	19.4

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWP, SPPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/29)	134	134	138
GERMAN MARK (4/29)	1.66	1.66	1.71
BRITISH POUND (4/29)	1.77	1.76	1.72
FRENCH FRANC (4/29)	5.58	5.62	5.80
CANADIAN DOLLAR (4/29)	1.19	1.18	1.15
SWISS FRANC (4/29)	1.52	1.54	1.45
MEXICAN PESO (4/29)	3,066	3,047	2,994

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/29) \$/troy oz.	335.700	338.100	-5.8
STEEL SCRAP (4/28) #1 heavy, \$/ton	92.00	92.00	-8.5
FOODSTUFFS (4/27) index, 1967=100	199.9	201.4	-2.2
COPPER (4/25) c/lb.	103.7	103.6	-8.9
ALUMINUM (4/25) c/lb.	62.3	62.4	-1.1
WHEAT (4/25) #2 hard, \$/bu.	4.10	4.08	38.0
COTTON (4/25) strict low middling 1-1/16 in., c/lb.	54.27	53.39	-34.2

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Kansas City market, Memphis market.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/24) S&P 500	410.17	412.70	7.7
CORPORATE BOND YIELD, Aaa (4/24)	8.33%	8.29%	-6.3
INDUSTRIAL MATERIALS PRICES (4/24)	97.5	97.5	1.1
BUSINESS FAILURES (4/17)	420	444	9.1
REAL ESTATE LOANS (4/15) billions	\$401.5	\$401.9r	-2.8
MONEY SUPPLY, M2 (4/13) billions	\$3,442.8	\$3,442.8r	1.6
INITIAL CLAIMS, UNEMPLOYMENT (4/11) thous.	404	416r	-18.9

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
PERSONAL INCOME (Mar.) annual rate, billions	\$4,990.5	\$4,963.2r	4.4
CONSUMER SPENDING (Mar.) billions	\$4,040.7	\$4,029.9r	4.6
NEW HOME SALES (Mar.) annual rate, thous.	513	602	3.2
ORDERS FOR DURABLE GOODS: MFG. (Mar.) billions	\$122.6	\$120.6r	9.3

Sources: Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/13)	\$939.6	\$940.7	11.3
BANKS' BUSINESS LOANS (4/15)	288.3	287.4	-10.5
FREE RESERVES (4/15)	1,081r	1,504r	65.5
NONFINANCIAL COMMERCIAL PAPER (4/15)	145.4	140.4	-5.6

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (4/28)	3.50%	3.83%	5.92%
PRIME (4/29)	6.50	6.50	8.93
COMMERCIAL PAPER 3-MONTH (4/28)	3.96	3.98	5.93
CERTIFICATES OF DEPOSIT 3-MONTH (4/29)	3.91	3.96	6.08
EURODOLLAR 3-MONTH (4/25)	4.04	4.00	6.11

Sources: Federal Reserve Board, First Boston

*Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

INTRODUCING A BEER THAT FLOWS FROM THE PAGES OF HISTORY.

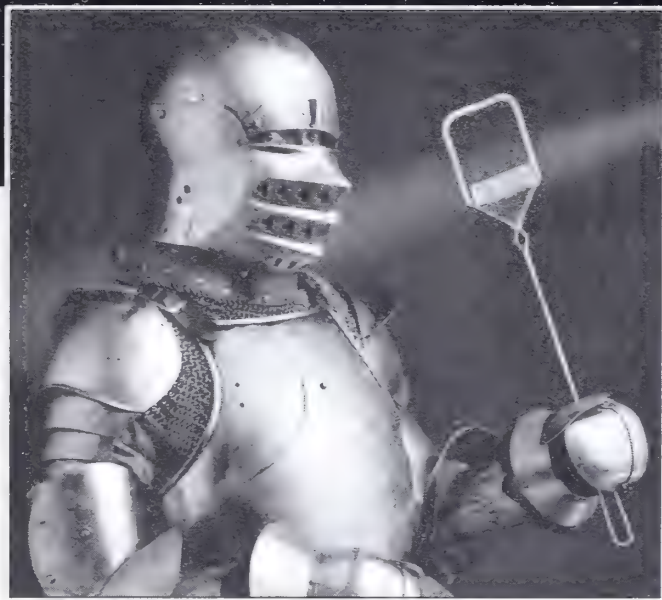


In 1855, Frederic Miller introduced America to a very special beer. Well, introductions are once again in order. New Miller Reserve. An all-barley draft brewed in the classic tradition. Reserve and Reserve Light. Beer as rich in taste as it is in history.



©1991 Miller Brewing Company. Miller, Reserve, 100% Barley Draft, and Light are trademarks of Miller Brewing Company. Miller Reserve is a registered trademark of Miller Brewing Company. Miller Reserve is brewed in Chicago, IL.

Ever Get The Feeling You're Paying For More Protection Than You Need?



That's what happened to many of the Pest Control Operators of California.

Their "boiler plate" property/liability policy had them paying the same premium rate as some of the biggest crop dusting operations, even though they didn't have the same kinds of risks.

They came to us for a solution.

Along with their insurance broker, we rolled up our sleeves, studied their industry and identified the risk differences within the pest control business. We

then built tailored coverages, services and rates to fit their specific needs.

Are they saving money? A lot. Plus we showed them how to avoid risks and minimize accident costs, which led to a substantial refund on their premiums at the end of the year. And now we're working as a team on their workers compensation insurance, too.

This is just one example of how our customer-focused property/liability and workers compensation plans are helping to control insurance costs.

For more examples, call your independent agent or broker, or our CEO, Bob Puccinelli, directly at (415) 627-5331.

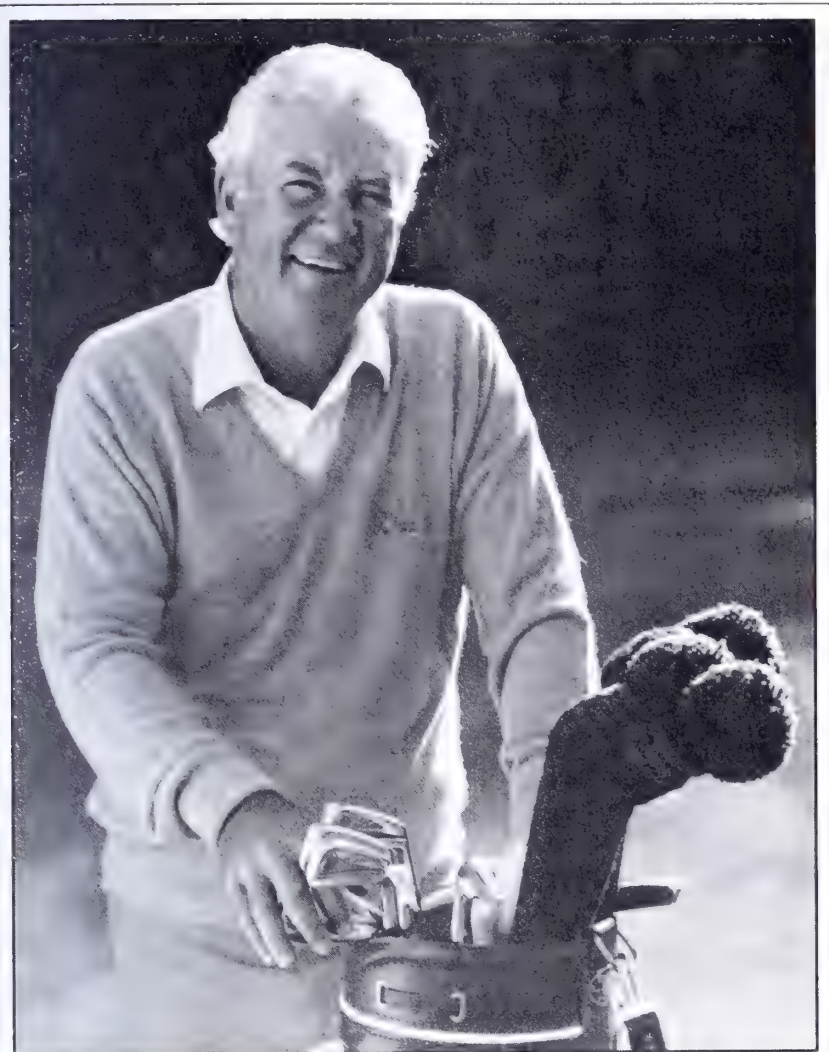
Because if you're not careful, you could be paying for risks you're not even taking.

Industrial Indemnity

A Crum and Forster organization
A XEROX Financial Services Company
Home Office: San Francisco

National Stuttering Awareness Week

MAY 11-17



Sports commentator and United States Open champion Ken Venturi, who personally overcame a speech impediment, leads this year's campaign to prevent stuttering with a message of help and hope.



For more information, write:

**STUTTERING
FOUNDATION
OF AMERICA**

INCORPORATED IN THE STATE OF CALIFORNIA

A Non-Profit Organization

Since 1947

Helping Those Who Stutter

P.O. Box 11749 • Memphis, TN 38111-0749



How can you demand your rights when you don't have a voice?

Child abuse reports are on the rise. One out of every five children lives

in poverty. And one out of every five young people drop out of high school.

Meanwhile, children's voices are silenced. Children Now is a nonpartisan,

California-based advocacy organization that speaks for all the children in

the state. We're the only organization that speaks for all the children in

the state. We're the only organization that speaks for all the children in

the state. We're the only organization that speaks for all the children in

EDITOR-IN-CHIEF: Stephen B. Shepard

IMAGING EDITOR: John A. Dierdorff

IEF ECONOMIST: William Wolman

ISTANT MANAGING EDITORS:

Bert J. Dowling, Mark Morrison, G. David Wallace

T DIRECTOR: Malcolm Fromman

IOR EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, Jith H. Dobrzynski, Mark Frons, Geoff Lewis, Cro Scotti, rith N. Vamos, Lee Walczak (Washington), Chris Welles, ymour Zucker

ITORIAL PAGE EDITOR: John E. Pluenecke

IEF OF CORRESPONDENTS: Keith G. Felcyn

TERMINAL EDITOR: William J. Holstein (Editor), Elizabeth iner (Sr. Editor)

IOR WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis icago), William Glasgall, Gene G. Marcial, Bruce Nussbaum, nn Pearson, Karen Pennar, Otis Port

SOCIATE EDITORS: Duane E. Anderson, Deirdre A. Depke, Amy inkin, Peter Finch, Jeffrey M. Laderman, William D. Marbach

RECTOR, EDITORIAL OPERATIONS: Thomas J. Reed

CTURE EDITOR: Lawrence Lippmann

IOR ART DIRECTOR: Laura Baer

RECTOR OF SYSTEMS: Claire Conte Worley

ONOMICS: James C. Cooper (Sr. Economist/Business Outlook edi-), Kathleen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel isoc. Economics editors) Gene Koretz (Economic Trends editor)

PARTMENT EDITORS: Books: Denise Demong Corporate Fi- nce: Larry Light Industries: Thane Peterson Information ccessing: John W. Verity International Edition: Joyce mahan International News: Peter Galuska Stanley Reed In- vestment Banking: Leah Nathans Spiro Legal Affairs: Michele den Marketing: Christopher Power, Mark Landler (Assoc.) Mar- ts & Investments: Gary Weiss Money & Banking: John ehan News: Harns Collingwood People: Michael Oneal Person- Business: Donald H. Dunn, Joan Warner Science: Emily T. Smith oreboards: Fred F. Jespersen Social Issues: Troy Segal chnology: Robert Buder, Telecommunications: Peter Coy ansportation: Andrea Rothman The Workplace: Aaron Bernstein

AFF EDITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill h, zanne Woolley, Laura Zinn Paul M. Eng (Asst editor)

IPY EDITORS: Harry Maurer (Deputy chief), Prudence Crowther, chael Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack bbins, Jim Taibi (Sr. copy editors), Pam Black, Carl Desens, Hardy een, Aleta Kaufman, Cynthia McClean, David Pengilly, Malka Percal, yug Royalty, Gail Fowler, Dalia Kandiyyot, Aida Rosano, Eva Stettner esearchers)

ODUCTION COPY EDITORS: Donald Halsband (Chief), Hallberg ilmundsson, Celine Keating, Robert S. Norman, Lawrence Dark, ephan M. Romanoff

TT: Steven Taylor (Deputy director), Cynthia Friedman, Francesca ssina, Jay Petrow (Assoc. directors), Alice Cheung, Craig Socia ssist. directors) Graphics: Arthur Eves (Director), Joan Danaher eputy director), Rob Doyle (Sr. Illustrator), Laurel Dams, berto Mena, Ray Vella (Illustrators), Jamie Bouchamp (Computer ist) Production: Stephen J. Romeo (Asst. mgr.)

OTOS: Sue Bloom (Director Picture editor), Todd James, Scott Mlyn, ynnie Weil (Assoc. Picture editors), Anne Murray, (Asst editor) thleen Daly (Researcher), Bettina Baudon (Researcher - Pans) an Clark (Traffic), Lawrence Crowe (Librarian)

ITORIAL OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne yndquez (Production managers) Thomas R. Dowd, Sharon L. Eng de Lee, Jose L. Martin, Jane M. Perkins, Craig Sturges, Karen rok, Ilse V. Walton, Nicholas White (Makeup editors), Dalgis I. Arnold, isk Lindicy, Edgardo Torres (Asst. makeup editors) Donald C. arson (Traffic manager), Bruce M. Arnold, Leo Corbie (Production sts)

RESPONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walecia Konrad onston: Gary McWilliams, Geoffrey Smith (Chicago): Lois Thernier eputy Mgr.), Julia Flynn, David Greising, Kevin Kelly Cleveland: alchary Schiller (Mgr.) Connecticut: Lisa Driscoll Dallas: Wendy aliner (Mgr.), Stephanie Anderson Forest Detroit: James B. Treese ay, David Woodruff Los Angeles: Ronald Grover (Mgr.), Larry rmstrong (Sr. Correspondent), Kathleen Kenwin, Eric Schine Miami: id DeGeorge (Mgr.) Philadelphia: Joseph Weber (Mgr.) Pitts- igh: Michael Schroeder (Mgr.), Mana Mallory San Francisco: ussell Mitchell (Mgr.), Richard Brandt, Joan O'C. Hamilton, Robert of, Kathy Rebello Seattle: Don Jones Yang (Mgr.) Washington: ephen H. Wildstrom (Sr. News Editor), Stan Crook (News Editor), my Borrus, Brian Bremner, John Carey, Paula Dwyer, Dean Foust, usan B. Garland, Howard Gleckman, Douglas Harbrecht, Peter Hong, ark Lewyn, Paul Magnusson, Mike McNamee, Tim Smart, Catherine ank, Christina Del Valle (Asst. editor) Bonn: John Templeman ay, Gail Schares Hong Kong: Pete Engardio London: Richard A. elcher (Mgr.), Mark Maremont Mexico City: Stephen Baker (Mgr.) iscow: Rose Brady (Mgr.) Paris: Stewart Toy (Mgr.), Bill Javetski, onathan B. Levine Rome: John Rossant (Mgr.) Tokyo: Robert Neff ay, Neil Gross, Ted Holden, Karen Lowry Miller Toronto: William Symonds (Mgr.)

DITORIAL SERVICES: Broadcasting: Ray Hoffman Business lanager: Barbara Boynton Information Services: Jude T. Hayes irector), Judi Crowe (Asst. editor), Fred Katzenberg, Elisa S. ink, Xualin Soong Office Manager: Roselyn Kopit Public elations: Christine Summerson, Josephine Coppola Readers eport: Zenobia Brown Reprint Permission: Lawrence Clayton ystems: Ina L. Kichen (Mgr.), Ron Brayer, Courtenay Eddy

UBLISHER: John W. Patten

R. VP, OPERATIONS: Gary B. Hopkins

R. VP, ADVERTISING SALES: Karl A. Spangenberg

P, INTERNATIONAL: Gerd Hinske

P, CIRCULATION: Kitty Carroll Williams

P, DIRECTOR OF MARKETING: Cara Erickson

/S, SALES: Constance E. Bennett (San Francisco), G. Jarvis Coffin (Atlantic Region), Dan Dunn (Chicago), Molly F. Ford (Northeast- n Region)

ONTROLLER: Gary M. Singer

IRECTOR, ADVERTISING BUSINESS: Linda F. Carvalho

IRECTOR, PRODUCTION: Mario J. Talluto

VALUE LINE: 'MAY ALL COMPANIES SO FOUNDER!'

We officers and top executives of the Value Line Cos. are shocked by the vicious attack by BUSINESS WEEK against Value Line Inc. and Jean Buttner, our CEO ("Value Line: Too lean, too mean?" Finance, Mar. 16). Your article is full of errors, exaggerations, and misquotes.

The article made the following seriously damaging statements about the *Value Line Investment Survey*: "...Survey editors no longer feel certain that computer snafus can be corrected within 24 hours—an eternity in weekly publishing." The survey's subscribers and our shareholders deserve to know that in the 61 years we've been in business, we have always sent out our publications on time.

Value Line's management has spent millions of dollars on new computer equipment in which every component has a backup recovery method. Our MIS [management information systems] staff has spent hundreds of hours developing a Comprehensive Disaster Recovery Plan. Our MIS staffers are on call 24 hours a day, 7 days a week just so we can prevent "computer snafus."

During the past year, our computer systems were running normally 99.57% of the time. The balance of the time was spent primarily on scheduled disaster-recovery drills conducted regularly on both mainframe and personal computers. The Value Line Cos. have never missed mailing the *Value Line Investment Survey* on a timely basis.

We strongly disagree that Value Line's "coffers are overflowing with idle funds." We invest our profits in the best investments around—our own family of mutual funds—which last year earned the following returns: Value Line Fund, 48.86%; Leveraged Growth Fund, 46.35%; Special Situations Fund, 36.61%. Additionally, the company invested some funds in a quantitatively managed hedge portfolio that returned 54.10% last year.

We are also investing a great deal of money in our businesses. The accusation that we are not leveraging our historic franchise is false. Just in the past

year alone we came out with five new products.

Value Line's annual outlay for salaries and benefits has fallen as staff cut-backs occurred because we automated the work done by two departments so that we could run more efficiently. Are we to be criticized for being more efficient? Company contributions to employee health care are not down as you allege, but up 35% since 1990, and medical claims are submitted directly to the insurance carrier.

The *Value Line Investment Survey's* ranking system, which was originated by Arnold Bernhard, has been evolving since the company was founded in the 1930s. Jean Buttner has always acknowledged that Samuel Eisenstadt has made many valuable contributions to that evolution since he joined the company in 1946, particularly in the development of methods for ranking stocks and allocating assets.

To compare the price-earnings ratio of a financial-services company with the over-the-counter market or Dow Jones industrial average, which contains cyclical stocks whose earnings are currently depressed and whose prices are currently in favor, is to compare apples and oranges.

We have never heard Jean Buttner make any of the statements you attribute to her in the article.

As to the company having "founded in transition from the first to the third generation"—may all companies so founder! Contrary to your assertions, management decisions have been made and new products and services were introduced.

A substantial investment has been made in a new money-management product. A mutual fund was launched in April. Two new publications have been introduced. Value Line's electronic data base has been greatly expanded. In short, there have been more decisions and actions taken to introduce new products in the past year than at any time in Value Line's history.

Since Jean Buttner became president, earnings are up 171%. In the past 12 months, the stock price has risen from 20½ to 34¼. Third-quarter profits are up 66%, and earnings for the first nine

BUSINESS WEEK
MAY 11, 1992 ***3265
ISSN 0007-7135

Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Printed in the U.S.A. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9079. Registered for GST as McGraw-Hill Inc. GST #R12307-67. Copyright © 1992 McGraw-Hill Inc. A registered title registered in U.S. Patent Office.

Officers of McGraw-Hill Inc.: Joseph L. Dione, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Penglass, Senior Vice President, Treasurer.

Photocopying. This journal is registered at the Copyright Clearance Center (CCC), 27 Congress St., Salem, MA 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609-426-5494. ISSN 0007-7135/92/\$2.75



HelpWorTe



Designed for the
most important part of
any computer.

The person who uses it.

These days, it seems just about anyone can make and sell computers. But only one company has a way to give you more—service and support unmatched by anyone else in the industry. It's called HelpWare,[™] and it's yours with every IBM PS/2[®] computer.

HelpWare is a whole new way of working with IBM. It's with you every step of the way—before you buy a PS/2, while you're using it, even when you're ready to move on to more powerful models. It's a new number to call with your PC questions, a new 30-day quibble-free return policy, new education centers, new trade-in and lease plans, plus a host of other offerings for PS/2 and OS/2[®]. In short, HelpWare is total customer satisfaction—the most and best service and support you can get.

With HelpWare, there's a lot standing behind a PS/2. And that could be the best reason to be sitting in front of one.

Introducing IBM HelpWare for PS/2.

- A collection of service and support nobody else can touch.
- HelpBuy[™]: trade-ins, leases, money-back guarantee.
- HelpLearn[™]: in-person, in-depth, hands-on education centers.
- HelpCenter[™]: for fast, thorough answers, call 1 800 PS2-2227.
- A host of other offerings available, yours with every PS/2.

IBM

Readers Report

months of the current fiscal year are already higher than those of any fiscal year in the company's history—results achieved without the help of the fired employees who we suspect fed your reporter his "facts."

Samuel Eisenstadt
Research Chairman
Harold Read
Vice-President & CFO
Rodd Baxter
Secretary & General Counsel
Rudolph Carryl
Director, Research Dept.
Value Line Inc.
New York

(The letter was signed by seven other Value Line executives.)

Editor's note: CEO Buttner declined to talk to BUSINESS WEEK or authorize interviews with other executives. Our story was based on seven weeks of reporting. We interviewed more than 20 current and former Value Line employees, as well as independent sources. We also obtained documents, including internal Value Line memorandums. We feel the story was fair and accurate.

JAPANESE CEOs WORK HARD FOR THEIR MONEY

After reading "Why Japanese executives deserve lower pay" (Readers Report, Mar. 9), I must respond to Al Forbes's remarks. As an executive with a large Japanese auto-finance company, I have an opposing view.

Our president, who is Japanese, does not frequent country clubs, is not chauffeured, does not frequent nightclubs, nor does he fly in a private jet.

He travels to our operations alone, addresses our employees with vigor, and instills great pride and motivation. He is a unique, gifted leader who would make General Motors, Ford, or Chrysler leadership fall back into the mid-management ranks. Also, he can make decisions—tough ones—quickly and accurately.

Walt Adams
Nissan Motor Acceptance Corp.
Torrance, Calif.

Do Japanese executives really deserve lower pay than their American counterparts? It is a moot point. Al Forbes, "after four years working

...for a Japanese giant," wants us to believe that no Japanese CEO makes decisions alone. But my personal experience tells a different story.

On Feb. 13, Takayoshi Shimada, president of Hunioyki Co., accompanied by two Chinese interpreters, went to Tongcheng County, Anhui Province on joint-venture business.

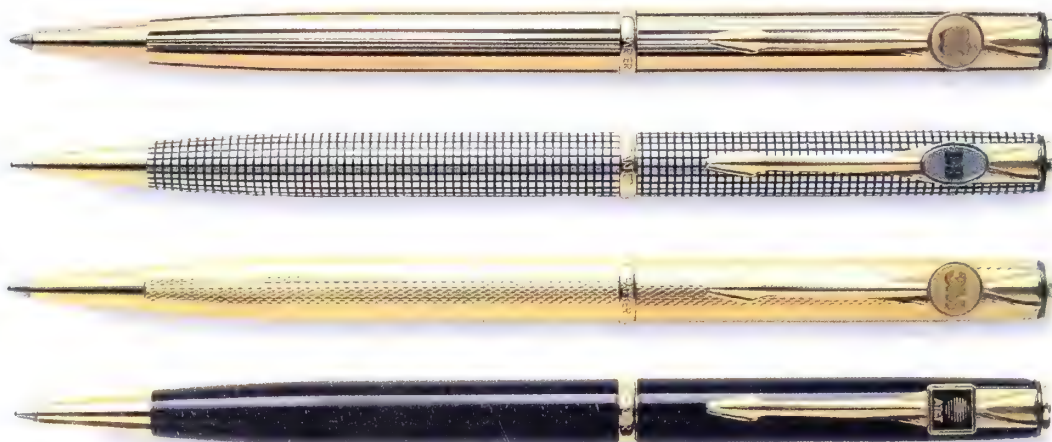
His company agreed to transfer three sets of assembly lines (which can produce respectively air, engine-oil, and gasoline filter elements) to Tongcheng Filter Elements Factory.

Shimada offered, signed, and decided everything alone on the spot for his company in the absence of other executives. As a middleman of the transaction, I saw with my eyes a Japanese CEO travel alone, attend a meeting alone, and make a decision alone.

Junshi Wang
China Institute of Contemporary
International Relations
Beijing

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4464. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

NOW THERE'S MORE THAN ONE WAY TO SAY "THANK YOU."



With ten distinctive finishes to choose from, there's a Parker Insignia for everyone on your corporate gift list. That's why more and more leading companies are making the Insignia their gift of choice. These beautiful writing instruments are designed to fit naturally in the writer's hand, and each one comes with a lifetime guarantee. Plus, your company's logo can be placed on every pen with jewelry-quality clip emblems. For more information, or your complimentary Corporate Gift Guide, call 1-800-522-3021.

 **PARKER**
INSIGNIA
LIFETIME GUARANTEED

BUDGET AND AMERICAN EXPRESS COMBINE FORCES TO CUT TRAVEL COSTS.

Everybody has to cut travel costs these days. Some companies just help you do it better than others.

Every time you use the American Express® Card at Budget, you can choose from three exclusive offers like a low rate on a luxurious Lincoln. Or 10% off your next rental. Or a double upgrade. Make your next trip smarter than ever by joining forces with Budget and American Express.

To receive these offers, here are a few details you will want to know. These offers are good between 4/1/92 and 6/30/92 at participating Budget locations, when you charge your rental with the American Express Card. You will need to mention offer at time of reservation and at time of

THREE SMART CHOICES

\$39⁹⁹ Per Day.

Lincoln.

Unlimited Mileage.

*Optional LDW \$12.99
or less where available.*

10% OFF

*On compact through
full-size cars.
2 or more rental days.*

**DOUBLE
UPGRADE.**

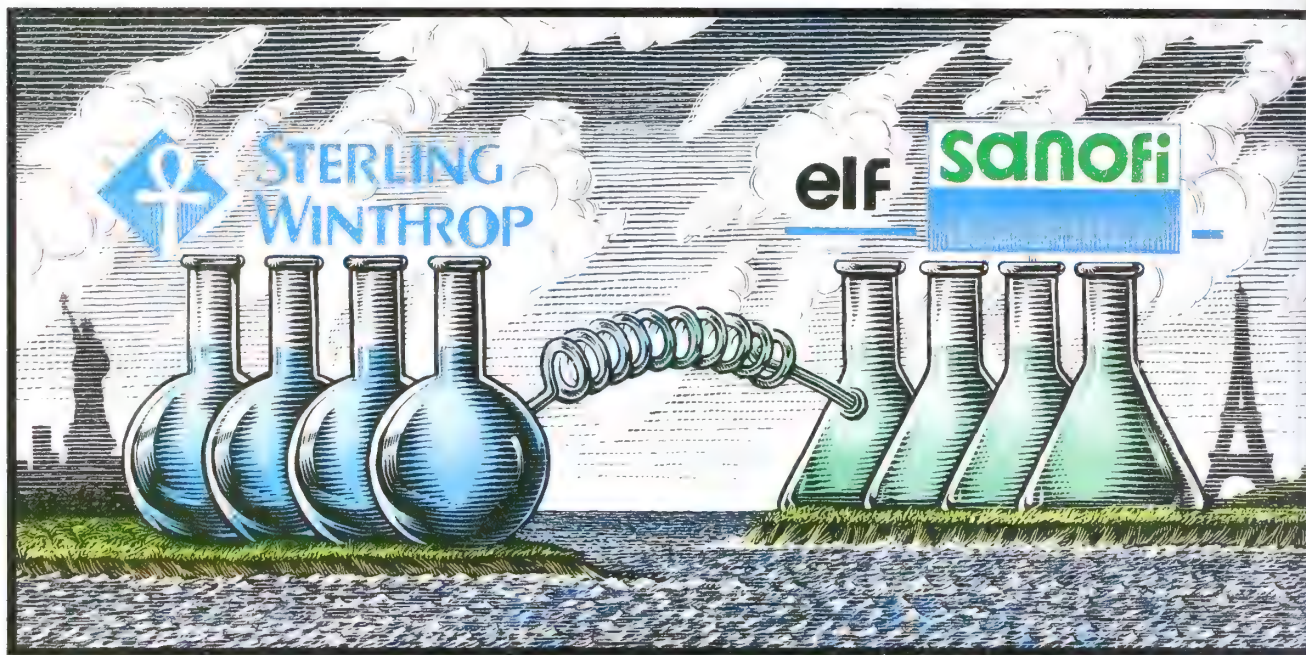
*When you reserve an
intermediate-size car,
receive a double upgrade
to a full-size.*

rental. Three-day advance reservations are required. Double upgrade subject to availability of larger car at time of rental. Refueling service, taxes and optional items are extra. Offers not available with any other discount or promotion. 10% off not available with CorpRate® or government rates. Blackout periods, surcharges for extra drivers and drivers under 25, and other normal rental requirements will apply. Car must be returned to renting location. Lincoln rate may be higher in New York and other major metropolitan areas. Only one offer per rental. For information and reservations, contact your travel consultant or call Budget at 800-527-0700 and ask for the American Express promotional offers.



THE SMART MONEY IS ON BUDGET.

Actual results may vary.



FOR STERLING WINTHROP and
ELF SANOFI, the decision to JOIN
FORCES or remain INDEPENDENT
became *surprisingly* SIMPLE. They
discovered a WAY to do BOTH

The companies were poised on either side of the Atlantic like virtual mirror images. Sterling Winthrop wanted to expand its European market. France's Elf Sanofi sought entry into the U.S. And their product lines were highly complementary.

Merger was one option. Instead, Sterling Winthrop and Elf Sanofi developed an innovative alliance to meet their objectives. Lehman Brothers was appointed by Sterling Winthrop to provide advice and assistance throughout the process.

**A GLOBAL ALLIANCE
PRODUCES A NEW
INDUSTRY LEADER.**

At the heart of the structure are a series of joint ventures. The companies that manufacture, market and sell prescription medicines around the world operate under the name Sanofi Winthrop. The companies that manufacture over-the-counter medicines in Europe operate under the name Sterling Health.

Through these ventures each company increased the sales and marketing infrastructures without, yet no debt was generated. And through their alliance, Sterling Winthrop and

Elf Sanofi kept their own independent discovery research efforts while gaining the R&D "critical mass" necessary in today's pharmaceutical industry.

When the deal was concluded, the world had gained a new global pharmaceutical leader — with over \$2 billion in alliance sales — even though no cash had changed hands.

**SOLUTIONS AS UNIQUE AS
THE CLIENTS THEY SERVE.**

The alliance of Sterling Winthrop and Elf Sanofi was an unusual situation, but most financial advisory challenges fall into "unusual" these days. Indeed, we at Lehman Brothers believe every situation is one-of-a-kind, and we work with our clients to customize solutions.

Perhaps that is why Lehman Brothers is a leading financial advisor to the pharmaceutical industry. In the last year alone, we worked with numerous healthcare companies ranging from biotechnology firms to some of the largest pharmaceutical companies in the world.

If you have a need for that sort of experience and unique approach to problem solving, we'd like to be involved.

LEHMAN BROTHERS

MERCHANTS OF DEBT: KKR AND THE MORTGAGING OF AMERICAN BUSINESS

By George Anders

Basic Books • 328pp • \$23

IN THE BELLY OF THE BUYOUT BEHEMOTH

The definitive Wall Street middlemen of the 1980s were Drexel Burnham Lambert Inc. and its largest client, Kohlberg Kravis Roberts & Co. Each reaped vast, windfall profits as the preeminent promoters of symbiotic forms of high-leverage finance: Drexel popularized the junk bond, while KKR did the same for the leveraged buyout. Feeding off one another's ingenuity and greed, Drexel and KKR promoted ever-larger and more highly leveraged acquisitions until, in early 1989, they joined hands and jumped into the abyss of the ultimate megadeal: the \$26.4 billion buyout of RJR Nabisco Inc.

The RJR deal helped catalyze the collapse of the junk-bond market. Stuck with massive inventories of unsalable securities, Drexel went bankrupt in 1990. In *Merchants of Debt: KKR and the Mortgaging of American Business*, George Anders convincingly asserts that RJR's post-deal crises also pushed KKR close to ruin. In this, he not only goes beyond what has been previously published but also turns inside-out the assumption that has underlain most writing about RJR, notably *Barbarians at the Gate*: that on Wall Street, victory is landing the deal.

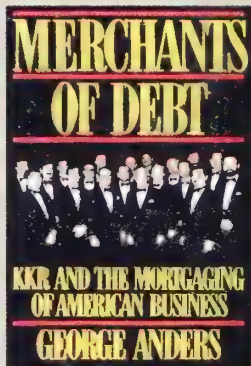
According to Anders, KKR, in its eagerness to land RJR, made a critical concession: If RJR's \$6 billion in junk bonds were to sag in price, KKR would boost the interest rate. As it turned out, the bonds lost so much value that the new rate that KKR was obligated to set would have capsized RJR. Marty Lipton, the famed Wall Street lawyer, urged Henry Kravis to put RJR into Chapter 11. "My jaw dropped when I heard that," Kravis told Anders, who writes: "Playing through Kravis's mind were a series of harrowing realizations: 'My God, can you imagine what that does to the financial institutions of America? And the world for that matter? Certainly KKR is out of business.'"

KKR skirted apocalypse by doing what it had always done best: securing large

sums of other people's money. It persuaded its limited partners, mainly public-employee pension funds, to more than double their equity investment. In effect, KKR bungled its way into buying RJR twice. Unlike Drexel, KKR survives—though shorn of its Midas mystique and much of its clout.

In addition to its climactic depiction of the RJR fiasco, *Merchants of Debt* abounds with fresh, if not always enticing, detail. Anders, a veteran reporter for *The Wall Street Journal*, gained unparalleled access to Kravis and his coun-

Anders provides the closest look yet at KKR's inner workings but avoids sharp judgments



in and partner, George Roberts. His exhaustively researched book provides the closest look yet at KKR's inner workings. But *Merchants* is weakened by the timidity of its analysis. Too often, Anders shies away from the sharp conclusion warranted by his account.

In a key passage, he describes how KKR's lawyers talked Kravis and Roberts out of charging RJR its standard "advisory" fee, roughly 1% of purchase price—or \$300 million, which worked out to \$89,000 an hour. For the next few months, KKR's partners saw RJR as a stepping stone to even bigger deals. Anders depicts Roberts leafing through the latest *Fortune* 500 "as if he were flipping through a Sears catalogue, picking out lawn furniture." Roberts casually informs a visitor that "there are two or three candidates in the top ten that might make good buyout candidates."

This is devastating reportage, but An-

ders punctuates it with the mildest comments: "Only gradually did Kravis and Roberts realize that their world was coming undone. . . . Their Rolodex brimmed with contacts, contributing to supreme confidence that bordered on arrogance." Arrogance? Try megalomania.

Setting KKR's story in a larger context, Anders dismisses the LBO wave as a fad whose only lasting impact was shift wealth from the mass of corporate employees to a managerial elite allied with Wall Street. The beneficiaries of buyouts, he argues, "to a remarkable degree used other people's sacrifices as a means of financing their own gentrification." In Anders' estimation this makes buyouts "one of the most profoundly undemocratic ventures the United States had ever seen."

No one benefited more from LBO mania than KKR, which, Anders writes, has generated more than \$7 billion in investment gains. But despite his largely negative view of LBOs, he lionizes KKR as "one of the great capitalist success stories of the century."

Are Kravis and Roberts heroes, villains, or something in between? conspicuously absent from *Merchants* is any direct sustained analysis of the motives or character. Indeed, the book contains only scant biographical information. It's as if Kravis and Roberts were beamed down, buyout ready, from another planet. Their rise is implausibly presented as a triumph of manners: "For many people on Wa-

Street, rudeness was a way to show power. For the KKR executives, politeness was a way to gain power."

What truly separated Kravis and Roberts from rival LBO aspirants was the unrelenting intensity of their pursuit of success. Their essential achievement was to divert billions of dollars of institutional money into an obscure, déclassé transaction originally called a "bootstrap" and now known as an LBO. Along the way, their resolve was steeled by drudgery and rebuff. If they ever suffered from self-doubt, they never let it show.

Unlike Michael R. Milken, one of the few equals in the art of securities promotion, Kravis and Roberts have remained on the right side of the law. But as with Milken, spectacular success induced in these driven, narrowly experienced men a disbelief in the limits of scale. Today RJR, tomorrow IBM and AT&T. Kravis and Roberts were, according to

Medical studies reveal...

The earlier you use Rogaine, the better your chances of growing hair.



"My hair's completely filled in. It started growing in under 2 months. It was amazing! Early treatment... it works!" —Jim Wilets, 30

Rogaine is the only product ever proven to grow hair. And studies show that using it at the first signs of hair loss gives you the best chance that it will grow hair for you.

What are the early warning signs of losing hair?

Everyone loses a little hair. Fifty to 80 hairs a day is normal. If you're losing more than 100 hairs a day without normal replacement, the first sign will often be thinning of the "crown" at the top of your scalp. See your doctor when you first notice it, because this small bald spot can grow larger over time.



"I may not have grown any hair after 6 months, but most of my hair's stopped falling out. I'm glad I got to the doctor fast."
—Luis Silva, 20

of the men who tried *Rogaine* saw at least moderate hair regrowth. Thirty-six percent had minimal regrowth and only 16% had no regrowth.

Doctors also found that it usually takes 4 months or more before you can begin to evaluate your use of *Rogaine*. Side effects were minimal: only 5% of the men tested had itching of the scalp.

Two million men worldwide have tried *Rogaine*. In yearlong clinical tests conducted by dermatologists at 27 medical centers nationwide, virtually half (48%)



"The first time I saw hair growing was at about 8 months. I hadn't lost much... but I'm not taking any chances." —Tony Vila

Will *Rogaine* work for you?

Only a dermatologist or another doctor who treats hair loss can tell you, so see one soon. The sooner you get your prescription for *Rogaine* (which is now available in an economical 3-pack), the sooner you could be growing hair.

For more information, a list of doctors in your area who can help you, and a certificate worth \$10 as an incentive to visit your doctor, call the toll-free number below:

**Send in the coupon or call
1 800 753-5559 ext 679
for your \$10 certificate. Soon.**

Fill this in now. Then, start to fill in your hair loss.

Mr. Keith Barton, The Upjohn Company
PO Box 9040, Opa Locka, Florida 33054-9944

Dear Mr. Barton:

Please send me a free brochure, full of information on how to treat my hair loss with *Rogaine*. And just to make sure I don't forget to go to my doctor about my hair loss, please send me a list of doctors who can help me and a certificate worth \$10 as an incentive to see my doctor. Thanks.

Name _____

Address _____

City/State/Zip _____

Phone _____ Age _____

Upjohn

DERMATOLOGY
DIVISION

US\$ 5497 00

679

© 1992 The Upjohn Company

January 1992

For a summary of product information, see adjoining page.

Rogaine
TOPICAL
SOLUTION minoxidil 2%

The only product proven to grow hair.

Rogaine
TOPICAL
SOLUTION
minoxidil 2%

The only product ever proven to grow hair.

What is ROGAINE?

ROGAINE Topical Solution, discovered and made by The Upjohn Company, is a standardized topical (for use only on the skin) prescription medication proved effective for the long-term treatment of male pattern baldness of the crown and in females for diffuse hair loss or thinning of the frontal areas of the scalp.

ROGAINE is the only topical solution of minoxidil. Minoxidil in tablet form has been used since 1980 to lower blood pressure. The use of minoxidil tablets is limited to treatment of patients with severe high blood pressure. When a high enough dose in tablet form is used to lower blood pressure, certain effects that merit your attention may occur. These effects appear to be dose related.

Persons who use ROGAINE Topical Solution have a low level of absorption of minoxidil, much lower than that of persons being treated with minoxidil tablets for high blood pressure. Therefore, the likelihood that a person using ROGAINE Topical Solution will develop the effects associated with minoxidil tablets is very small. In fact, none of these effects have been directly attributed to ROGAINE in clinical studies.

How soon can I expect results from using ROGAINE?

Studies have shown that the response to treatment with ROGAINE may vary widely. Some patients receiving ROGAINE may see faster results than others; others may respond with a slower rate of hair growth. You should not expect visible growth in less than 4 months.

If I respond to ROGAINE, what will the hair look like?

If you have very little hair and respond to treatment, your first hair growth may be soft, downy, colorless hair that is barely visible. After further treatment the new hair should be the same color and thickness as the other hair on your scalp. If you start with substantial hair, the new hair should be of the same color and thickness as the rest of your hair.

How long do I need to use ROGAINE?

ROGAINE is a treatment, not a cure. If you respond to treatment, you will need to continue using ROGAINE to maintain or increase hair growth. If you do not begin to show a response to treatment with ROGAINE after a reasonable period of time (at least 4 months or more), your doctor may advise you to discontinue using ROGAINE.

What happens if I stop using ROGAINE? Will I keep the new hair?

If you stop using ROGAINE, you will probably shed the new hair within a few months after stopping treatment.

What is the dosage of ROGAINE?

You should apply a 1-mL dose of ROGAINE two times a day, once in the morning and once at night, before bedtime. Each bottle should last about 30 days (1 month). The applicators in each package of ROGAINE are designed to let you apply the correct amount of ROGAINE with each application. Please refer to the Instructions for Use.

What if I miss a dose or forget to use ROGAINE?

If you miss one or two daily applications of ROGAINE, you should restart your twice-daily application and return to your usual schedule. You should not attempt to make up for missed applications.

Can I use ROGAINE more than twice a day? Will it work faster?

No. Studies by The Upjohn Company have been carefully conducted to determine the correct amount of ROGAINE to use to obtain the most satisfactory results. More frequent applications or use of larger doses (more than 1 mL twice a day) have not been shown to speed up the process of hair growth and may increase the possibility of side effects.

What are the most common side effects reported in clinical studies with ROGAINE?

Studies of patients using ROGAINE have shown that the most common adverse effects directly attributable to ROGAINE Topical Solution were itching and other skin irritations of the treated area of the scalp. About 7% of patients had these complaints.

Other side effects, including light-headedness, dizziness, and headaches, were reported by patients using ROGAINE or placebo (a similar solution without the active medication).

What are some of the side effects people have reported?

The frequency of side effects listed below was similar, except for dermatologic reactions, in the groups using ROGAINE and placebo. Respiratory: bronchitis, upper respiratory infection, sinusitis. Dermatologic: irritant or allergic contact dermatitis, eczema, hyperichthosis, local erythema, pruritus, dry skin/scalp flaking, exacerbation of hair loss, alopecia. Gastrointestinal: diarrhea, nausea, vomiting. Neurologic: headache, dizziness, lightheadedness. Musculoskeletal: fractures, back pain, tendinitis. Cardiovascular: edema, chest pain, blood pressure increases/decreases, palpitation, pulse rate increases/decreases. Allergic: nonspecific allergic reactions, hives, allergic rhinitis, facial swelling. Sensitivity: Special Senses: conjunctivitis, ear infections, vertigo; visual disturbances including decreased visual acuity. Metabolic/Nutritional: edema, weight gain. Urinary Tract: urinary tract infections, renal calculi, urethritis. Genital Tract: prostatic epididymitis, sexual dysfunction. Psychiatric: anxiety, depression, fatigue. Hematologic: lymphadenopathy, thrombocytopenia. Endocrinologic:

Individuals who are hypersensitive to minoxidil, propylene glycol, or ethanol must not use ROGAINE.

ROGAINE Topical Solution contains alcohol, which could cause burning or irritation of the eyes, mucous membranes, or sensitive skin areas. If ROGAINE accidentally gets into these areas, bathe the area with large amounts of cool tap water. Contact your doctor if irritation persists.

What are the possible side effects that could affect the heart and circulation when using ROGAINE?

Although serious side effects have not been attributed to ROGAINE in clinical studies, there is a possibility that they could occur because the active ingredient in ROGAINE Topical Solution is the same as in minoxidil tablets.

Minoxidil tablets are used to treat high blood pressure. Minoxidil tablets lower blood pressure by relaxing the arteries, an effect called vasodilation. Vasodilation leads to retention of fluid and increased heart rate. The following effects have occurred in some patients taking minoxidil tablets for high blood pressure:

Increased heart rate. Some patients have reported a heart rate increased by more than 20 beats per minute. Rapid weight gain of more than 5 pounds or swelling (edema) of the face, hands, ankles, or stomach area. Difficulty in breathing, especially when lying down, a result of an increase in body fluids or fluid around the heart, worsening of or new onset of angina pectoris.

When ROGAINE Topical Solution is used on normal skin, very little minoxidil is absorbed, and the possible effects attributed to minoxidil tablets are not expected with the use of ROGAINE. If, however, you experience any of the possible side effects listed, discontinue use of ROGAINE and consult your doctor. Presumably, such effects would be most likely if greater absorption occurred, e.g., because ROGAINE was used on damaged or inflamed skin or in greater than recommended amounts.

In animal studies, minoxidil in doses higher than would be obtained from topical use in people, has caused important heart-structure damage. This kind of damage has not been seen in humans given minoxidil tablets for high blood pressure at effect doses.

What factors may increase the risk of serious side effects with ROGAINE?

Individuals with known or suspected underlying coronary artery disease or the presence of or predisposition to heart failure would be at particular risk of systemic effects (that is, increased heart rate or fluid retention) of minoxidil, were to occur. Physicians and patients with these kinds of underlying diseases should be conscious of the potential risk of treatment if they choose to use ROGAINE.

ROGAINE should be applied only to the scalp and should not be used on other parts of the body because absorption of minoxidil may be increased and the risk of side effects may become greater. You should not use ROGAINE if your scalp becomes irritated or is sunburned, and you should not use it along with other topical treatment medication on your scalp.

Can individuals with high blood pressure use ROGAINE?

Individuals with hypertension, including those under treatment with antihypertensive agents, can use ROGAINE but should be monitored closely by their doctor. Patients taking guanethidine for high blood pressure should not use ROGAINE.

Should any precautions be followed?

Individuals using ROGAINE should be monitored by their physician 1 month after starting ROGAINE and at least every 6 months thereafter. Discontinue ROGAINE if systemic effects occur.

Do not use it in conjunction with other topical agents such as corticosteroids, retinoids, petrolatum, or agents that enhance percutaneous absorption. ROGAINE is for topical use only. Each milliliter contains 20 mg minoxidil, and accidental ingestion could cause adverse systemic effects.

No carcinogenicity was found with topical application. ROGAINE should not be used by pregnant women or by nursing mothers. The effects on labor and delivery are not known. Efficacy in postmenopausal women has not been studied.

Pediatric use: Safety and effectiveness have not been established under age 18.

Caution: Federal law prohibits dispensing without a prescription. You must see a doctor to receive a prescription.

Upjohn

DERMATOLOGY
DIVISION

The Upjohn Company
Kalamazoo, MI 49001 USA

© 1992 The Upjohn Company

USJ 5497 (0) January 1992

Books

Anders, temporarily embarrassed by their RJR debacle but not in the least humbled. He says: "Proud of their own record, Kravis and Roberts see nothing to apologize for." Coming at the end of *Merchants*, these words ring more ominously than the author seems to intend.

BY ANTHONY BIANCO

Senior writer Bianco has covered Wall Street since 1982.

BOOK BRIEFS

THE CULTURE OF CONTENTMENT

By John Kenneth Galbraith

Houghton Mifflin • 195pp • \$22.95

THE RULING CASH

There's a chilling message in John Kenneth Galbraith's latest work. There exists in the U.S. a "fortunate and favored" elite with extraordinary power to influence events and set policy, whether at the voting booth, in government, or in Corporate America. Using a smattering of statistics, many anecdotes, and his clever, hyperbolic style, the Harvard economist analyzes how this elite gained strength in the 1980s and how unlikely it is to cede the rewards of its contented existence. Espousing a short-term, self-interested mentality, it is threatening the economy's health and presiding over a polarization between haves and have-nots.

Galbraith is at pains to say he is merely examining and explaining a culture as an anthropologist might. He doesn't spare its members from biting criticism. Even the "scholars, journalists, [and] professional dissidents" who express sympathy for the excluded and underclass are pawns of the system who "by their dissent... give a gracing aspect of democracy to the ruling position of the fortunate."

Unfortunately, Galbraith's argument is both familiar and overstated. As he acknowledges, Robert B. Reich, also of Harvard, took note of the outside clout and resistance to change of the "fortunate fifth" of the population in his recent *The Work of Nations*. And Galbraith is unconvincing when, for example, he asserts that the contented will resist any but the most modest cuts in defense spending. Still, his point is worth making, as are a few subsidiary ones—such as his observation that Adam Smith, darling of the laissez-faire Reaganites, was "fully open to a necessary or useful role for the state." *The Culture of Contentment*, while no on a par with some of Galbraith's classics, is a useful and accessible introduction to a troubling topic.

BY KAREN PENNAI

Nightmare Scenario #2

THE RUNAWAY CASH SUCKER.

"Why didn't someone tell me this @\$!?!& network would cost so much?"

A lot of executives go pale when they see how much their computer networks are really costing them.

"What's with all this new payroll?" they ask. "I thought this thing was going to save us money."

Too late. They're strapped to a runaway cash sucker and heading downhill fast.

The fact is, the real economics of running a computer network are never even mentioned by the people trying to sell you one.

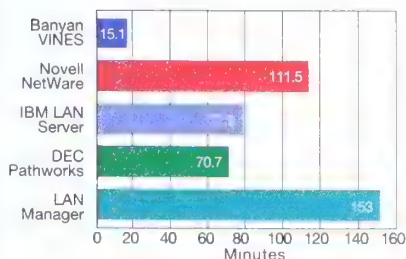
And not knowing can cost you plenty.

Research proves Banyan more cost-effective than Novell, IBM, DEC and Microsoft.

Which brings us to the research report offered free on this page.

It was compiled by the Business Research Group, and shows how

Time Required To Add A Network-Wide Service

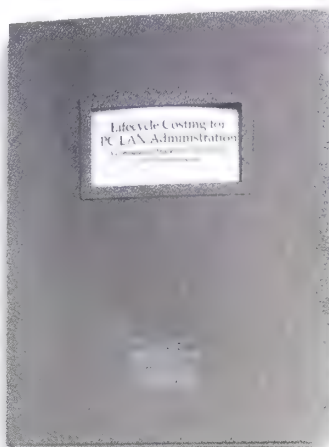


Business Research Group/Newton, MA bc16D

For sheer cost-effectiveness, Banyan surpasses everyone.

Banyan®, Novell®, IBM®, DEC®, and Microsoft® stack up against each other in cost of operation.

What BRG did was to interview the day-to-day LAN managers at 180 different organizations about the length of time required to execute 11 typical network functions.



Send for this impartial survey of network cost-efficiency. It's full of hard, actionable data.

Banyan won in all 11 categories. Often by astounding margins.

Whatever the job, administrators of Banyan VINES® networks were able to do them faster.

And faster translates into smaller staffs and lower cash outlays.

Banyan won across the board because our unique integrated architecture greatly simplifies administration. With Banyan VINES, cost-efficiency is built in from the beginning.

Computer networks are rapidly becoming indispensable to business. So understanding the true cost of networking is now critical.

The BRG report is a good place to start. This is a real-world report based on the testimony of actual network managers.

Banyan is the world leader in simplifying the use and management of networks—and we can show you why.

For your free copy of the BRG report, call 1-800-828-2404.

Please send this coupon to: BANYAN, 120 Flanders Road, Westboro, MA 01581 1-800-828-2404.

NAME _____
TITLE _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE _____



THE PROBLEM ISN'T SAVINGS, IT'S THE WAY WE INVEST

BY ROBERT KUTTNER



Pumping up the savings rate won't pump up the economy. In the 1980s, for example, the affluent had plenty of cash to invest but failed to fulfill their roles as creators of productive investment

Four weeks ago in this space, I wrote approvingly of research by Fred Block and Robert L. Heilbroner that suggests that America's savings rate is miscalculated. Their most arresting finding is that when you count realized capital gains as part of personal income, the overall rate of private savings in the 1980s did not decline, contrary to widespread belief. Several indignant readers wrote to advise that any freshman economics student knows why capital-gains income shouldn't be counted as savings: By definition, savings are what is left over from income after consumption. And by definition, realized capital gains are not savings (since they don't depress consumption), but are simply an inflation of existing financial assets.

But this is precisely the trouble: These time-honored definitions lead to a misunderstanding of the issue. Suppose, for example, that Smith buys a share of stock for \$100. The stock price then goes up to \$200. Jones takes \$200 out of his savings account and buys the stock from Smith. At this point, Smith's net worth has increased by \$100. But Jones is no poorer—the form of his financial asset has simply changed. Meanwhile, Smith can take his \$100 gain and invest it in something new or spend some of it. The transaction is analogous to fractional reserve banking, in which banks “create” money by taking in deposits and making loans. The depositor has all his money, while the borrower has new resources.

HOLDING BACK. By reviewing the 1980s in this light, we gain a better understanding of what went wrong with the U.S. economy and what is wrong with the orthodox remedy of increasing the savings rate. For one thing, the supply-side program had perverse results. Affluent investors increased their financial net worth and their share of the nation's wealth, but this increase in their private financial savings did not translate into increased investment. Affluent people failed to fulfill their role as creators of new national productive wealth. Instead, they spent some of their windfall and invested much of the rest in existing financial assets—the shares of existing stocks or in speculative real estate. Conventional accounting of the national income pictures this merely as an inexplicable fall in the savings rate, which misses the point.

In truth, the problem was not on the savings side of the equation, for there was plenty of financial liquidity. The problem was that the people with the money could not discern opportunities to place their savings in new productive investments. One indicator of this reality is the declining interest rates on Treasury securities. Despite the immense public

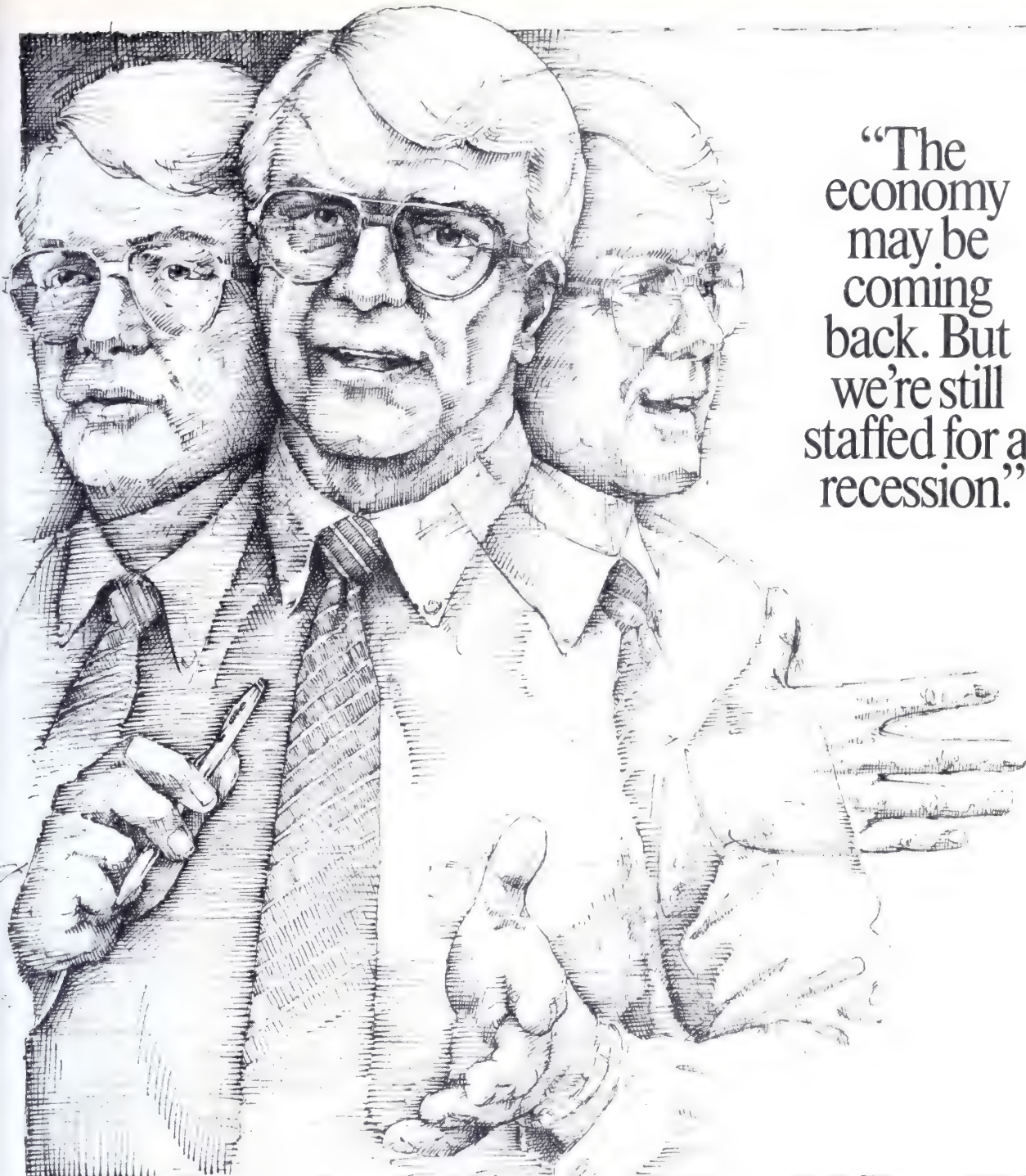
deficit, the Treasury has had no difficulty financing the national debt at relatively moderate interest rates. If there were plenty of opportunities for productive investment in the private sector, the Treasury would be paying more to sell its bonds.

WRONG REWARDS. Several implications flow from this revisionist analysis. First, the deeper problem afflicting the U.S. economy is not a shortage of financial savings but a series of institutional failings. Because of the structure of our financial markets, investors have incentives to invest short term rather than long and this depresses productive capital formation. Moreover, the banks, one of the key institutions for channeling savings into investment, have been so traumatized by the excesses of the 1980s they are now excessively risk-averse. And they were no match for their German and Japanese counterparts even before the recent real estate blowout. Further, the loss of global competitiveness of many U.S. industries discourages investors from putting their capital at risk, and the recession intensifies the belief that new investments will not pay off.

Second, we must reconsider economic cause and effect. While investment technically equals savings after the fact, a higher savings rate does not automatically translate into a higher rate of productive investment, particularly when the economy is in recession and beset by institutional problems. Simply increasing the aggregate rate of savings will not cure the institutional defects we've discussed. The conventional recovery strategy is to increase the savings rate and wait for increased investments to follow. But it would be more sensible to cure the institutional problems noted above to make investment more attractive, which in turn would coax out more savings.

Third, the composition of public spending is a key part of the story that is usually left out of the standard analysis. As Heilbroner noted, government spending is not a source of savings or dissavings but rather a use of savings—on either public investment or public consumption. During the 1980s, the composition of public outlay shifted. The federal government spent more money on consumption and on military expenditure and less on civilian investment. If the government had invested more, the deficit would have been more economically useful and less of a drag on performance. One big policy conclusion follows: very wealthy people are increasing their financial worth but not investing it in productive assets, it would be preferable for the government to tax some of that private windfall and put the proceeds directly into productive public investments.

ROBERT KUTTNER IS CO-EDITOR OF THE AMERICAN PROSPECT AND AUTHOR OF THE END OF LAISSEZ-FAIRE



“The economy may be coming back. But we’re still staffed for a recession.”

“Hiring more people may not be the answer.”

No one knows whether we’re on the verge of a major recovery—or a short-term comeback. But many companies will choose to gamble. In their rush to take advantage of rising short-term demand, they’ll add long-term staff they don’t need—and incur expenses they simply can’t afford. There’s a more prudent way. With



Guy Millner
CEO

Norrell *flexible staffing*, you can quickly change the size of your workforce as demand changes. If you like, Norrell can even train and manage the workers for you. Just one example of how we’re helping companies find smarter ways to get things done. Find out how you can grow more efficiently. For a free staffing consultation, call your local Norrell office today.

Norrell®

Smarter Ways To Get Things Done.™

America's love affair with the original minivan continues. Introducing the new 1992 Plymouth Voyager with a money-saving optional Family Value Package that offers automatic transmission; power liftgate release; dual horns; body-side moldings; and air conditioning at no charge; plus over 60 other standard features, including a minivan driver's air bag.* All for \$14,266!† You'll also value the available all-wheel drive, available anti-lock brakes and new

MORE OF WHAT VALUES IN



Plymouth Voyager Family

Owner's Choice Protection Plan: 7 year/70,000 mile powertrain warranty, or 3 year/36,000 mile bumper to bumper warranty.†

No other car maker offers this level of flexibility in choosing the warranty that's exactly right for you. So visit your Chrysler-Plymouth dealer today. Or call 1-800-PLYMOUTH for purchasing or Gold Key Plus/leasing information.



Advantage: Plymouth

A DIVISION OF CHRYSLER CORPORATION

AT AMERICA MINIVAN.



ue Package: \$14,266



*No charge air based on sticker price savings of items in package if purchased separately. Air bag fully effective only with seat belt. †Sticker price with option package. Title, tax and destination fee extra. Optional wheels and roof rack shown. ‡See limited warranties at dealer. Restrictions apply. 3/36 excludes normal maintenance, adjustments & wear items. **Buckle up for safety!** © Plymouth/Chrysler Corp., 1992 36USC380

OFFICIAL SPONSOR
OF THE 1992 U.S.
OLYMPIC TEAM



BY GENE KORETZ

A PRODUCTIVITY-LED RECOVERY SPELLS 'JOYLESS PROSPERITY'

There's a silver lining in the current cloudy employment outlook, contends economist Stephen S. Roach of Morgan Stanley & Co. "The U.S.," he says, "is now entering its first productivity-led recovery since the early 1960s."

Corporate restructuring, which reshaped U.S. manufacturing in the 1980s, has recently been spreading like wildfire through the nation's vast service sector, observes Roach. And an initial payoff in productivity is already apparent. In the six quarters following the last business-cycle peak in mid-1990, non-farm business output per hour has grown at a 0.8% annual pace—about half a percentage point faster than the comparable period in the early 1980s. Moreover, most of this improved efficiency occurred in the service sector, where productivity posted a 0.7% rise last year.

The negative aspect of this trend is a sharp slowdown in services employment. After exploding during the past expansion, service jobs have been moving

their work forces in a drive to reap productivity gains from their huge investment. "Continuing pressures from international competition, deregulation, and slower demand growth will reinforce this effort," says Roach.

The payoff could come soon. Overall private-sector productivity should rise at a 1.5% rate in the next few years, predicts Roach, double its anemic 1980s' pace. And faster productivity growth implies reduced cost pressures, less inflation, lower interest rates, and improved corporate profit margins.

While household incomes and consumption will lag behind the pace of earlier, employment-driven recoveries, says Roach, manufacturing should still thrive as it responds to rising exports and capital investment. Indeed, he notes that services plan to boost their capital spending by 8% this year—"a sign that the sector is raising its bet on achieving productivity breakthroughs."

WHO REALLY PROFITS FROM MORTGAGE INTEREST DEDUCTIONS?

Most homeowners regard the mortgage interest deduction on their homes as an inalienable right, which they guard with the ferocity of a lioness defending her cubs. But the mortgage interest tax subsidy now overwhelmingly favors higher-income taxpayers, reports economist James M. Poterba of Massachusetts Institute of Technology in a new study.

By lowering marginal tax rates and particularly by raising the standard deduction in the 1986 tax law, tax reform legislation in the 1980s significantly reduced the value of the deduction for homeowners. Indeed, Poterba notes that from 1985 to 1991 the number of tax returns claiming mortgage interest deductions fell from 28.1 million to about 24.1 million, even though the number of homeowners grew by several million.

More significant is the change in the ranks of those benefiting from the interest deduction. By 1988, notes Poterba, over 52% of the total tax savings from the deduction accrued to the 8.5% of taxpayers with the highest incomes. By contrast, 79% of taxpayers (those with incomes below \$40,000) received only 19.2% of the largess doled out through tax savings. The percent of taxpayers with incomes between \$30,000 and \$40,000 who claimed the mortgage deduction declined sharply from 47.2% in 1986 to 39.8% in 1988, while the percentage claiming the deduction actually increased at higher income levels.

CONSUMERS ARE FEELING BETTER—BUT NOT ABOUT WASHINGTON

Consumers are exhibiting an unusual form of schizophrenia these days, observes economist Brian Jones of Salomon Brothers Inc. While their views of the economic outlook and of government economic policy usually move in tandem, this linkage has recently broken down.

The University of Michigan's monthly consumer survey tells the story. Although its economic expectations index has been rising since January, consumer views of government economic policy have been eroding steadily since the end of the gulf war. Indeed, in the early April survey results, a record 53% of respondents felt the government was doing a poor job managing the economy.

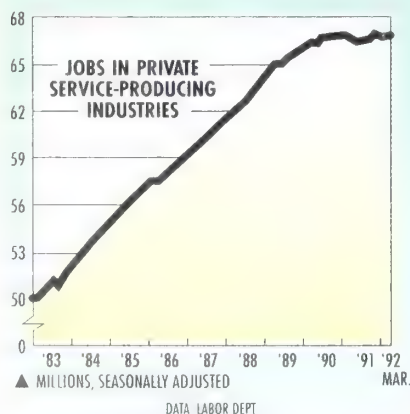
For Republicans, the situation bears an uncomfortable parallel to that of 1980, notes Jones. In that Presidential election year, the index of consumer economic expectations rose sharply, but the percentage of consumers describing government economic policy as poor climbed to a then-record 50%. Shortly thereafter the incumbent President, Jimmy Carter, suffered a humiliating defeat.

THE BIG DIP IN THE NUMBER OF BIG-TICKET BUYERS

The current slowdown in sales of big-ticket items will persist throughout most of the industrial world through the rest of the decade, predict economists Gert von der Linde and Richard Hokenson of Donaldson, Lufkin & Jenrette Securities Corp. The reason: Industrialized nations are experiencing an unprecedented decline in the ranks of 20- to 29-year-olds, the key age group that establishes new households.

From 1991 to 2000, note the two economists, the number of people in this age bracket in North America and Western Europe will decline by about 17 million and will rise in Japan by less than a million. "It's no surprise," says Hokenson, "that the 1986 peak in housing starts, home sales, and car sales occurred in the very year that the U.S. had the most persons who were 25 years old." The ongoing decline in the number of young adults in almost all advanced countries, he suggests, means that efforts to reflate housing and consumption via macroeconomic policies will be less successful than in the past.

SERVICES EMPLOYMENT IS GOING NOWHERE



sideways since 1989 (chart). They are expected to grow far more slowly in the current upturn—as restructured companies stress productivity and as the huge surge in demand for services unleashed by the baby boomers' coming of age fades into history. For many households, says Roach, the years ahead are likely to be a period of relatively high unemployment and "joyless prosperity."

Meanwhile, service industries, which accounted for an astonishing 85% of business purchases of information technology in the past decade, have been paring

Congratulations to

the Winners of

THE SEVENTH ANNUAL



BUSINESS WEEK AWARDS

for Excellence in

Corporate Advertising.

The readers of Business Week have recognized twelve distinguished advertisers for creating the best remembered corporate campaigns in 1991.

The winners were determined based on 1991 advertising readership scores compiled for every issue of Business Week by Starch INRA Hooper. Starch is an independent research firm and the acknowledged readership measurement standard for the print industry.

Representative ads of the winning campaigns are shown on the following pages. In an advertising category with the highest creative standards, Business Week is proud to honor these companies for excellence in corporate advertising.

**Bender, Browning, Dolby &
Sanderson / Chicago, IL**



**AMOCO HELPS
MAKE COMING HOME
A LITTLE SAFER.**

**IT HELPS
GETTING HOME
EASIER**

com

1. *Pharmaceuticals* (1997) 10, 11-12.
 2. *Pharmaceuticals* (1998) 11, 12-13.
 3. *Pharmaceuticals* (1999) 12, 13-14.
 4. *Pharmaceuticals* (2000) 13, 14-15.
 5. *Pharmaceuticals* (2001) 14, 15-16.
 6. *Pharmaceuticals* (2002) 15, 16-17.
 7. *Pharmaceuticals* (2003) 16, 17-18.
 8. *Pharmaceuticals* (2004) 17, 18-19.
 9. *Pharmaceuticals* (2005) 18, 19-20.
 10. *Pharmaceuticals* (2006) 19, 20-21.
 11. *Pharmaceuticals* (2007) 20, 21-22.
 12. *Pharmaceuticals* (2008) 21, 22-23.
 13. *Pharmaceuticals* (2009) 22, 23-24.
 14. *Pharmaceuticals* (2010) 23, 24-25.
 15. *Pharmaceuticals* (2011) 24, 25-26.
 16. *Pharmaceuticals* (2012) 25, 26-27.
 17. *Pharmaceuticals* (2013) 26, 27-28.
 18. *Pharmaceuticals* (2014) 27, 28-29.
 19. *Pharmaceuticals* (2015) 28, 29-30.
 20. *Pharmaceuticals* (2016) 29, 30-31.
 21. *Pharmaceuticals* (2017) 30, 31-32.
 22. *Pharmaceuticals* (2018) 31, 32-33.
 23. *Pharmaceuticals* (2019) 32, 33-34.
 24. *Pharmaceuticals* (2020) 33, 34-35.
 25. *Pharmaceuticals* (2021) 34, 35-36.
 26. *Pharmaceuticals* (2022) 35, 36-37.
 27. *Pharmaceuticals* (2023) 36, 37-38.
 28. *Pharmaceuticals* (2024) 37, 38-39.
 29. *Pharmaceuticals* (2025) 38, 39-40.
 30. *Pharmaceuticals* (2026) 39, 40-41.
 31. *Pharmaceuticals* (2027) 40, 41-42.
 32. *Pharmaceuticals* (2028) 41, 42-43.
 33. *Pharmaceuticals* (2029) 42, 43-44.
 34. *Pharmaceuticals* (2030) 43, 44-45.
 35. *Pharmaceuticals* (2031) 44, 45-46.
 36. *Pharmaceuticals* (2032) 45, 46-47.
 37. *Pharmaceuticals* (2033) 46, 47-48.
 38. *Pharmaceuticals* (2034) 47, 48-49.
 39. *Pharmaceuticals* (2035) 48, 49-50.
 40. *Pharmaceuticals* (2036) 49, 50-51.
 41. *Pharmaceuticals* (2037) 50, 51-52.
 42. *Pharmaceuticals* (2038) 51, 52-53.
 43. *Pharmaceuticals* (2039) 52, 53-54.
 44. *Pharmaceuticals* (2040) 53, 54-55.
 45. *Pharmaceuticals* (2041) 54, 55-56.
 46. *Pharmaceuticals* (2042) 55, 56-57.
 47. *Pharmaceuticals* (2043) 56, 57-58.
 48. *Pharmaceuticals* (2044) 57, 58-59.
 49. *Pharmaceuticals* (2045) 58, 59-60.
 50. *Pharmaceuticals* (2046) 59, 60-61.
 51. *Pharmaceuticals* (2047) 60, 61-62.
 52. *Pharmaceuticals* (2048) 61, 62-63.
 53. *Pharmaceuticals* (2049) 62, 63-64.
 54. *Pharmaceuticals* (2050) 63, 64-65.
 55. *Pharmaceuticals* (2051) 64, 65-66.
 56. *Pharmaceuticals* (2052) 65, 66-67.
 57. *Pharmaceuticals* (2053) 66, 67-68.
 58. *Pharmaceuticals* (2054) 67, 68-69.
 59. *Pharmaceuticals* (2055) 68, 69-70.
 60. *Pharmaceuticals* (2056) 69, 70-71.
 61. *Pharmaceuticals* (2057) 70, 71-72.
 62. *Pharmaceuticals* (2058) 71, 72-73.
 63. *Pharmaceuticals* (2059) 72, 73-74.
 64. *Pharmaceuticals* (2060) 73, 74-75.
 65. *Pharmaceuticals* (2061) 74, 75-76.
 66. *Pharmaceuticals* (2062) 75, 76-77.
 67. *Pharmaceuticals* (2063) 76, 77-78.
 68. *Pharmaceuticals* (2064) 77, 78-79.
 69. *Pharmaceuticals* (2065) 78, 79-80.
 70. *Pharmaceuticals* (2066) 79, 80-81.
 71. *Pharmaceuticals* (2067) 80, 81-82.
 72. *Pharmaceuticals* (2068) 81, 82-83.
 73. *Pharmaceuticals* (2069) 82, 83-84.
 74. *Pharmaceuticals* (2070) 83, 84-85.
 75. *Pharmaceuticals* (2071) 84, 85-86.
 76. *Pharmaceuticals* (2072) 85, 86-87.
 77. *Pharmaceuticals* (2073) 86, 87-88.
 78. *Pharmaceuticals* (2074) 87, 88-89.
 79. *Pharmaceuticals* (2075) 88, 89-90.
 80. *Pharmaceuticals* (2076) 89, 90-91.
 81. *Pharmaceuticals* (2077) 90, 91-92.
 82. *Pharmaceuticals* (2078) 91, 92-93.
 83. *Pharmaceuticals* (2079) 92, 93-94.
 84. *Pharmaceuticals* (2080) 93, 94-95.
 85. *Pharmaceuticals* (2081) 94, 95-96.
 86. *Pharmaceuticals* (2082) 95, 96-97.
 87. *Pharmaceuticals* (2083) 96, 97-98.
 88. *Pharmaceuticals* (2084) 97, 98-99.
 89. *Pharmaceuticals* (2085) 98, 99-100.
 90. *Pharmaceuticals* (2086) 99, 100-101.
 91. *Pharmaceuticals* (2087) 100, 101-102.
 92. *Pharmaceuticals* (2088) 101, 102-103.
 93. *Pharmaceuticals* (2089) 102, 103-104.
 94. *Pharmaceuticals* (2090) 103, 104-105.
 95. *Pharmaceuticals* (2091) 104, 105-106.
 96. *Pharmaceuticals* (2092) 105, 106-107.
 97. *Pharmaceuticals* (2093) 106, 107-108.
 98. *Pharmaceuticals* (2094) 107, 108-109.
 99. *Pharmaceuticals* (2095) 108, 109-110.
 100. *Pharmaceuticals* (2096) 109, 110-111.
 101. *Pharmaceuticals* (2097) 110, 111-112.
 102. *Pharmaceuticals* (2098) 111, 112-113.
 103. *Pharmaceuticals* (2099) 112, 113-114.
 104. *Pharmaceuticals* (2100) 113, 114-115.
 105. *Pharmaceuticals* (2101) 114, 115-116.
 106. *Pharmaceuticals* (2102) 115, 116-117.
 107. *Pharmaceuticals* (2103) 116, 117-118.
 108. *Pharmaceuticals* (2104) 117, 118-119.
 109. *Pharmaceuticals* (2105) 118, 119-120.
 110. *Pharmaceuticals* (2106) 119, 120-121.
 111. *Pharmaceuticals* (2107) 120, 121-122.
 112. *Pharmaceuticals* (2108) 121, 122-123.
 113. *Pharmaceuticals* (2109) 122, 123-124.
 114. *Pharmaceuticals* (2110) 123, 124-125.
 115. *Pharmaceuticals* (2111)

Journal of Management Education 30(6)p. 789-804
© The Author(s) 2006
Reprints and permissions:
<http://www.sagepub.com/journalsPermissions.nav>

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is expected to reach 1.7 billion by the year 2015.



1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

For 200 years it's been one disaster after another.

It is important to note that the above is not a business



It is not possible to find a suitable δ for the present case.



Figure 8. Schematic of the proposed mechanism.



100 101

for $\mu = 0$ (see Fig. 1) and $\mu = 0.05$ (see Fig. 2) are shown. The $\mu = 0$ case corresponds to the $\text{U}(1) \times \text{U}(1)$ theory.



the former resources – and explain how they are applied


$$\cos \alpha = \frac{a}{b} \quad \sin \alpha = \frac{c}{b} \quad \tan \alpha = \frac{c}{a} \quad \cot \alpha = \frac{a}{c} \quad \sec \alpha = \frac{b}{a} \quad \csc \alpha = \frac{b}{c}$$

the world's airtightness. However, the model deviates, seen together, be-



exp. no. 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922,



the ratio $\frac{1}{2}$ is the same as the ratio of the number of the first group to the number of the second group.



... and the other nine in the second class went. And they



天



1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

Two important models that address this issue are the random effects and fixed effects



σ_0 and σ_1 . We define $\Delta t = \sigma_1 - \sigma_0$ when the value of



1. 4. 1.

1. *Chrysomelids* – 1 species, 1 pupa, 1 larva, 1 egg.



288822 *See* 288821

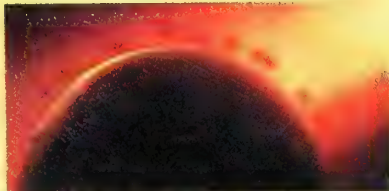
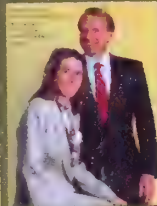
We get paid for results. **CIGNA**



DDB Needham Worldwide, Inc.
New York, NY

Digital Equipment Corporation
 Kenneth H. Olsen, *President & Director*
 Ketchum Advertising / Pittsburgh, PA
 Lawner Reingold Britton & Partners / Boston, MA
 Mullen Advertising, Inc. / South Hamilton, MA

DIGITAL OPENS NEW MARKETS FOR MERISEL.



At a time when many companies are looking for ways to expand their market, Digital Equipment Corporation (DEC) has found a way to do so. By opening up new markets for Merisel, a leading manufacturer of high-speed digital signal processors (DSPs), Digital has helped Merisel to grow its business. This is a story of how Digital's technology and marketing expertise can help other companies to succeed in new markets.

Merisel, a leading manufacturer of high-speed digital signal processors (DSPs), has found a way to expand its market. By opening up new markets for Merisel, Digital has helped Merisel to grow its business. This is a story of how Digital's technology and marketing expertise can help other companies to succeed in new markets.

Digital's technology and marketing expertise can help other companies to succeed in new markets. This is a story of how Digital's technology and marketing expertise can help other companies to succeed in new markets.

Digital's technology and marketing expertise can help other companies to succeed in new markets. This is a story of how Digital's technology and marketing expertise can help other companies to succeed in new markets.

NAS FROM DIGITAL. THE OPEN ADVANTAGE.

**HOW A \$21 BILLION
 TECHNOLOGICAL GIANT
 MANAGES TO REMAIN
 VIRTUALLY ANONYMOUS.**



FUJITSU
 COMPUTERS COMMUNICATIONS MICROELECTRONICS

Fujitsu LTD.
 Tadashi Sekizawa, *President*
 Asian Advertisers, Inc. / Tokyo, Japan
 Publicis, Inc. / New York, NY

Hitachi, LTD.

Tsutomu Kanai,
President & Representative Director

Dentsu Inc. / Tokyo, Japan

Technology that captures this kind
of moving target brilliantly.

Or this kind with similar ease.



HITACHI

It was impossible. Until they called Lockheed.



Lockheed leads.

Lockheed

Lockheed Corporation

Daniel M. Tellep,
Chairman of the Board & CEO

McGraw-Hill, Inc. / Los Angeles, CA

Norfolk Southern

Arnold B. McKinnon, *Chairman & CEO*

J. Walter Thompson / Atlanta, GA

Globe Trotter

[illegible]

NS NORFOLK SOUTHERN
1-800-445-6666

[illegible]

SAMSUNG

Technology that works, for life

Samsung

Kun Hee Lee, *Chairman*

Bozell Inc. / New York, NY

Cheil Communications Inc. / Seoul, Korea

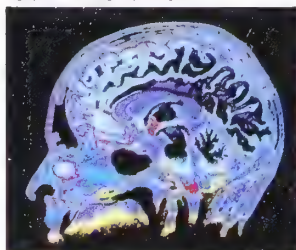
Siemens Corporation
Albert Hoser, President & CEO

SIEMENS

1895. That was then.



1991. This is now.



INTRODUCING THE WORLD'S
ONLY FAMILY OF BEARINGS
THAT CAN DO THIS.



TIMKEN

Doing what is best

The Timken Company
W.R. Timken, Jr. Chairman

Eric Mower & Associates / Rochester, NY

James A. Unruh, *Chairman & CEO*

James A. Unruh, *Chairman & CEO*

Right now, 140 airlines are filling their planes with Unisys computers.



UNISYS
All made in Japan

If you're going to the
 we'll be picking
 1992 Olympic Games
 up your tickets.

The 1992 Olympic Games are a once-in-a-lifetime event. To make sure you don't miss a moment of the action, we've put together a special package of tickets for the Opening Ceremony, the Summer Games, and the Winter Games. The package includes tickets for the Opening Ceremony, the Summer Games, and the Winter Games. The package is available for purchase at a special price.

For more information, call 1-800-888-8888.

The 1992 Olympic Games are a once-in-a-lifetime event. To make sure you don't miss a moment of the action, we've put together a special package of tickets for the Opening Ceremony, the Summer Games, and the Winter Games. The package includes tickets for the Opening Ceremony, the Summer Games, and the Winter Games. The package is available for purchase at a special price.

For more information, call 1-800-888-8888.

Anthony M. Frank, *Postmaster General*

Young & Rubicam / New York, NY

Winners of the Business Week Awards for Excellence in Corporate Advertising

*Amoco Chemical
Boeing
BP America
Digital Equipment
Eastman Kodak
Hitachi*

1 9 9 0

*Intel
Novell
Raytheon
Siemens
Timken
Westinghouse*

*Amoco Chemical
Andersen Consulting
Bull
Chemical Bank
Digital Equipment
Eastman Kodak*

1 9 8 9

*Fujitsu
Lockheed
Schott Glaswerke
Texas Instruments
Timken
Unisys*

*Amoco Chemical
BP America
CSX
Digital Equipment
Fujitsu
Honeywell*

1 9 8 8

*Lockheed
NEC
Texas Instruments
Timken
Unisys
Xerox Financial Services*

*Amoco Chemical
Chemical Bank
Digital Equipment
Honeywell
IBM*

1 9 8 7

*NEC
Norfolk Southern
Southwestern Bell
Texas Instruments
Xerox Financial Services*

THE LATEST SIGNS SAY THIS RECOVERY HAS STAYING POWER

What do you get when you cross the largest increase in final sales in four years with a big liquidation of inventories? Answer: a recovery. That's exactly what happened in the first quarter. The combination almost guarantees a pickup in output in the second quarter that will fuel growth in jobs and incomes and keep the upturn on track.

Real gross domestic product rose a modest 2%, at an annual rate, last quarter. That number will be revised twice, but for now, it means that the pace of economic growth was the fastest in three years. The best news, though, was that spending by consumers, businesses, government, and foreigners jumped 4.8% (chart).

The huge imbalance between demand and output led to a \$26.1 billion decline in business inventories last quarter. That drawdown clearly left stockpiles extremely thin as the second quarter got under way. Many companies will have to gear up production, if only to replenish their depleted inventories.

Some early signs of just such a pickup are beginning to crop up. The Commodity Research Bureau's index of raw-materials prices jumped more than 6% from late February to late April, after trending downward for a year and a half. Rising commodity prices typically accompany inventory rebuilding as industrial demand strengthens.

Another sign of peppier output is the three-week drop in new jobless claims to an annual rate of 404,000 for the week ended Apr. 11. Claims have not fallen for three weeks in a row since last August. The decline so far already suggests a rise in April payrolls. A further slide below 400,000, a level that last year's recovery attempt failed to penetrate, would be strong evidence that the job market—and the economy—are turning around for good.

CONSUMERS ARE THE DRIVING FORCE The classic mix of strong demand and low inventories has fueled many a recovery, but this upturn is also classic because it is consumer-led. Real consumer spending rose at an annual rate of 5.3% in the first quarter, fueled partly by lower interest rates and mortgage refinancings that put more cash in people's pockets. That gain was also the largest in four years, and it accounted for three-fourths of the quarter's growth in final sales.

Don't count on consumers to spend at that pace in coming quarters, though. Real aftertax income rose at

an annual rate of only 3% last quarter, meaning that consumers dipped into their already skimpy savings to finance their outlays. Savings as a percentage of after-tax earnings fell from 5.2% in the fourth quarter to 4.7% in the first quarter, the lowest rate in 2½ years.

Still, real income was on a rising trend through the first three months, although a temporary jump in farm-subsidy payments accounted for much of the March gain. And if job growth this spring meets expectations, household spending will be able to rise further, though less robustly, in the second quarter.

Consumers are obviously feeling better about the economy and their future. The Conference Board's index of consumer confidence rose strongly for the second consecutive month in April. It was up 8 points, to 64.8, the highest reading in seven months.

While households are still somewhat uneasy about their present situation, they have greatly improved expectations for the next six months (chart). The Conference Board says that the two-month jump in the expectations index, a reliable forecasting gauge, suggests that the economy is in the early stages of a recovery.

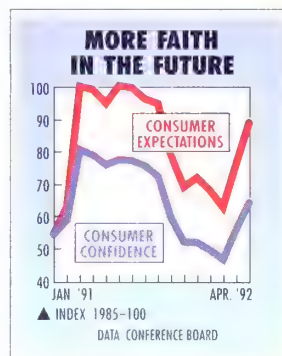
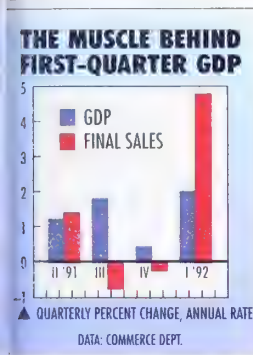
Although consumers still complain about current employment conditions, fewer of them are doing so. The proportion of households that rate jobs as "hard to get" has declined for two consecutive months, after a steady rise. Moreover, people are a good deal more optimistic about the job outlook.

Except for consumer spending and inventories, there was little other action of note in the first-quarter GDP report. Housing, state and local spending, net exports, federal nondefense purchases, and outlays for business equipment—listed by the size of their contribution—rounded out the gain in final sales.

Defense spending was a downer last quarter, as was business investment in buildings and other structures. It posted the seventh drop in the past eight quarters, reflecting the glut of commercial buildings.

INDUSTRY IS STOKING UP THE BOILERS With sales up, businesses are also more confident about the future. Their bottom lines are already perking up. Corporate profits last quarter were generally better than expected, reflecting the surge in demand.

Manufacturers seem ready to enjoy their share of



Business Outlook

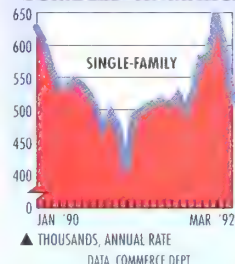
better times. New orders for durable goods rose 1.6% in March. The three-month average of orders, which smooths out the monthly gyrations, also rose in March after declining steadily since last September. Auto production is set to rise considerably in the second quarter, according to Detroit's schedules. As usual, that will provide a broad lift for the factory sector.

The only red flag in manufacturing is the persistent decline in unfilled orders. They fell 0.6% in March, the seventh consecutive drop. Factories will not feel confident enough to boost output and payrolls until their order backlog starts to rise. New orders will have to make further gains for that to happen.

Homebuilders are also doing better, though not as well as the early-year numbers had suggested. Sales of new single-family homes plunged 14.8% in March, to an annual rate of 513,000 (chart). The drop was the largest in 10 years, but sales were erratic last quarter.

In January and February, excitement over the now-defunct tax credit for first-time buyers

NEW-HOME SALES TUMBLED IN MARCH



and warm weather boosted sales. In March, the absence of those factors, plus a slight uptick in mortgage rates, hit sales hard. Still, first-quarter sales were 4.8% above the fourth-quarter level. And for the week ended Apr. 24, 30-year mortgage rates averaged below 9%, a level that will support rising demand.

INFLATION REMAINS FLAT ON ITS BACK

Although long-term rates are still high, mortgage rates are not likely to rise inordinately as long as the inflation outlook remains so rosy. Despite growing evidence of a true recovery, price wars among domestic competitors are breaking out (page 36). That's a reflection

of excess capacity in many industries. Some companies are trying to grab market share by cutting prices.

More direct measurements also show that inflation is on the wane. The Commerce Dept. reported that its GDP fixed-weight price index, one of the broadest gauges of inflation, rose at an annual rate of 3.1% from the fourth quarter to the first quarter. Measured from a year ago that means inflation using this index is running at 2.8%. That's down from 4.5% a year earlier.

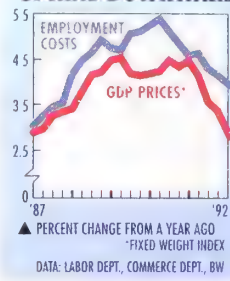
The slowdown in labor costs is a chief reason why inflation pressure continues to abate. The Labor Dept.'s employment cost index, which measures wages and benefits of civilian workers, rose at an annual rate of 3.6% in the first quarter, the same as in the fourth quarter. Benefits are still the fastest-rising component of labor costs.

Measured from the same quarter a year ago, labor costs are up only 3.9%. That's down from 4.6% last year and from 5.3% the year before (chart). The rebound in productivity growth that typically accompanies a recovery will enhance the inflationary impact of this moderation as 1992 wears on. A productivity pickup will allow unit labor costs to slow as well, and unit costs determine price pressures.

Meanwhile, the bonus for households is that, despite the slowdown in wages and benefits, inflation has slowed even more, allowing purchasing power to rise.

Stronger demand—especially from consumers—and low inventories are classic business-cycle gasoline. Lower inflation and interest rates than a year ago are the oxygen that will keep it burning. The spark, however, has to come from job growth. If the early employment indicators are right, the resulting fire should heat up the economy right into 1993.

WAGES AND PRICES SPIRAL DOWNWARD



THE WEEK AHEAD

PRODUCTIVITY AND COSTS

Tuesday, May 5, 10 a.m.

Output per work hour at nonfarm businesses likely increased at about a 1% annual rate in the first quarter, following a stronger 1.9% rise in the fourth quarter. That's suggested by a 1% gain in total hours worked and the 2% advance in real gross domestic product. As a result, unit labor costs in the nonfarm sector were probably up at a 2.5% clip last quarter, after edging up by just 0.9% in the fourth.

CAR SALES

Tuesday, May 5

New domestically made cars likely sold at an annual rate of just 5.7 million for

all of April, down from 6 million in March. Car sales were at a dreadful 5.6 million pace in the first 20 selling days of last month, but economists polled by MMS International, a division of McGraw-Hill Inc., are forecasting that sales in late April rose to a 6 million rate.

INSTALLMENT CREDIT

Thursday, May 7

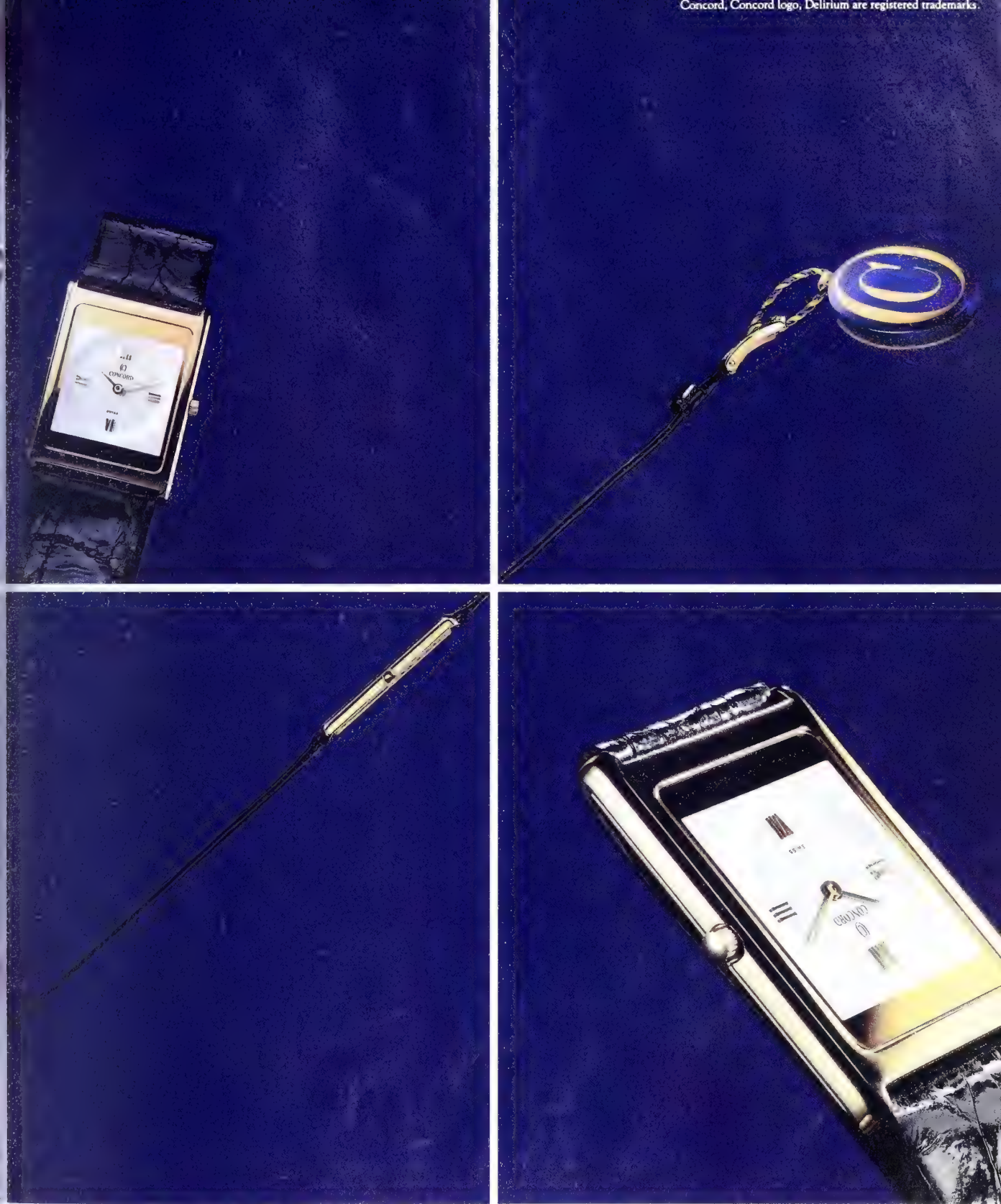
Consumers probably paid off as much of their debts as they added in March, according to the MMS report. The resulting flat reading for outstanding debt is indicated by sluggish retail sales and a drop in personal bank loans in March. Since the recession started in mid-1990, households' use of credit has slowed. In February, installment debt dropped by \$199

million. As a percent of disposable income, credit has fallen to a 6½-year low.

EMPLOYMENT

Friday, May 8, 8:30 a.m.

The MMS consensus is that nonfarm payrolls increased by a modest 70,000 in April. However, the most optimistic forecast—perhaps based on the downturn in initial unemployment claims—calls for a strong 165,000 gain in new jobs. Payrolls edged up by just 19,000 in March and are no higher than they were in December. That's worrisome for the outlook because the lack of new jobs derailed last spring's recovery. Economists also project that the unemployment rate stood at 7.3% in April, unchanged from February and March.



The fine line between sculpture and engineering.

CONCORD  DELIRIUM
SWISS
SINCE 1966

0.98 millimeter Delirium quartz movement, hand-assembled and precision-tested to the millisecond; water-resistant 18 karat gold case, hand-finished with a diamond-polished sapphire crystal.

NEIMAN MARCUS



DOWN IN THE DUMPS: IN A DOZEN YEARS, ONLY A HANDFUL OF THE NATION'S MOST POISONOUS SITES HAVE EVEN BEGUN TO BE CLEANED UP

MAY 11, 1992

THE TOXIC MESS CALLED SUPERFUND

INDUSTRY AND ENVIRONMENTALISTS AGREE: THE PLAN IS A DISASTER

The Girl Scouts may find they've helped crumble the whole cookie.

When Detroit's Big Three faced a \$40 million tab last year for cleaning up a toxic-waste site in Metamora, Mich., they sent their lawyers after more than 200 other parties that had also used the dump. Among the auto makers' targets: A local Girl Scout troop, which they claim sent garbage from a summer camp to the landfill. "We have no intention of paying," says a Girl Scout spokeswoman.

The incident underscores a grim reality: No one, not even the Girl Scouts, is safely beyond the legal tentacles of the 1980 Superfund law. Enacted after the chemical contamination of Love Canal in upstate New York, the measure was

supposed to provide a speedy cleanup for more than 1,000 hazardous waste sites across the U. S. It was to be funded by a tax on the chemical and petroleum industries and by assessments on corporate polluters.

But estimates of the nationwide cost of the cleanup have soared as high as \$750 billion—a stunner eclipsing even

the government rescue of the savings and loan industry. And no one is willing to pay the tab. The result? Superfund has turned into superscandal. After 10 years and \$11 billion spent so far, just 84 of the 1,245 sites on the Superfund high-priority list have been cleaned up. To make matters worse, scientists now are raising doubts about the dangers of the dumps.

LEGAL SWAMP. What's going on? Some classic government waste. Congressional investigators say, for instance, that contractors have used some of the \$6 billion they've received in government cleanup money for everything from dining lessons and Christmas parties to fighting a discriminatory charge. But far more of the money

SUPERSLOW, SUPEREXPENSIVE

	SUPERFUND SITES	1,245
	CLEANED-UP SITES	84
	CLEANUP COST*	\$11.1 billion

*SPENDING SINCE 1980 BY FEDERAL AGENCIES AND PRIVATE INDUSTRY. EXCLUDES ADMINISTRATIVE COSTS

DATA: ENVIRONMENTAL PROTECTION AGENCY

ey has been squandered on legal squabbles over who should pay. A recent RAND Corp. study found that from 1986 to 1989, insurers spent \$1.3 billion on Superfund litigation and cleanup—with \$1.2 billion of it going to lawyers. "All the money is going to gray flannel suits and virtually none is going to blue denims," says Eugene R. Anderson, a New York lawyer who represents clients that want their insurers to pay for cleanups.

Now there's a growing consensus in the battle-weary business community that if the nation is going to clean up its worst dump sites, Washington will have to find a different way to do it. One possibility—a no-fault program that would require all companies, the polluters and the pure alike, to help finance the detoxification of dump sites. "The whole idea of cleaning up the environment by fighting doesn't make sense to me—and I make an income out of it," says Stephen J. Paris, a Boston lawyer who specializes in environmental cases.

Washington has already taken some tentative steps to revise the Superfund rules. On Apr. 24, the Environmental Protection Agency issued a regulation that insulates from liability banks that simply hold mortgages on Superfund properties. The agency also is expected to propose a cap of perhaps 4% on the liability of municipalities, allowing small towns to escape relatively unscathed. That would solve big problems for Killingworth, Conn. (pop. 4,814), which has a \$1.6 million annual budget. The town may face a \$1 million tab—and possible bankruptcy—in a pending suit by B. F. Goodrich Co. and several other corporations for a cleanup contribution.

The proposed changes leave Corporate America holding the bag. "It's further poisoning the process," complains Jerry B. Martin, Dow Chemical Co.'s director of environmental affairs. Much of industry would like to throw out liability for past pollution altogether. But any effort to change Superfund so much is likely to face a hail of criticism from environmentalists.

FEAR OF FINES. Indeed, Superfund backers defend putting the financial burden on the biggest polluters, arguing that the fear of big penalties has forced companies to clean up their acts. "Superfund's environmental liability scheme has brought a new environmental ethic to industrial America," says EPA chief William K. Reilly.

That doesn't mean environmentalists don't have plenty of complaints about the current setup. They blast the snail's pace of the cleanup. And they gripe that EPA regional offices impose widely varying cleanup requirements. A lead-con-

taminated site in Ohio, for instance, was held to a cleanup standard only half as stringent as a similar property in Oregon. "There needs to be a cookbook-like standard to address problems consistently across regions," says Erik D. Olson, an attorney for the Natural Resources Defense Council.

Now, Superfund's woes extend to the very scientific underpinnings of the pro-

gram. New York State researchers found that the health risks to the residents of Love Canal from chemical wastes were grossly overstated. The EPA's studies even suggest that other environmental problems, such as indoor air pollution, pose a greater health risk than hazardous waste. And a report last year by the National Research Council found that the government lacks data to

THROWING BRICKBATS AT BIG OIL'S RECYCLING ACT

American consumers long have lacked an environmentally sound way to dump used motor oil. Many simply send it down storm drains, leave it for the garbageman to take to a landfill, or use it as weed killer—all of which pose threats to groundwater. To solve the problem—and give public relations a boost—Amoco, Mobil, and Exxon lately have been offering to do the public a favor by recycling used oil.

Now, a coalition of environmental groups claims that the oil company ads about the recycling programs are misleading. In a complaint filed with the Federal Trade Commission on Apr. 23, the Sierra Club, the Natural Resources Defense Council, and the Izaak Walton League of America, an environmental group, contend that consumers have been snookered because most of the oil collected is burned as fuel. They say the ads give the impression that the oil will be re-refined into lubricant.

Burning used oil as fuel, the environmentalists say, endangers the public's health by releasing lead and other toxic chemicals into the air. "These companies are using this 'green scam' to clean up their dirty images without changing their filthy behavior," says the Sierra Club's Daniel J. Weiss.

LESS HARMFUL. The companies concede that the oil is burned. But they argue that recycling is recycling—it doesn't matter how the oil is reused. They also maintain that the pollution that results from burning is within legal limits and less harmful than dumping the oil into groundwater. The complaint, the companies say, is a publicity stunt. "It's

fund-raising time for them, and we're their favorite villains," says an oil company executive. "The Republicans use ads with Ted Kennedy, the Democrats use Jesse Helms, and the environmentalists use the oil companies."

Actually, most used oil is collected by used-oil dealers—not the oil companies. They sell it to re-refiners, or as industrial boiler fuel, or

home heating oil. Amoco Corp. collects some of its

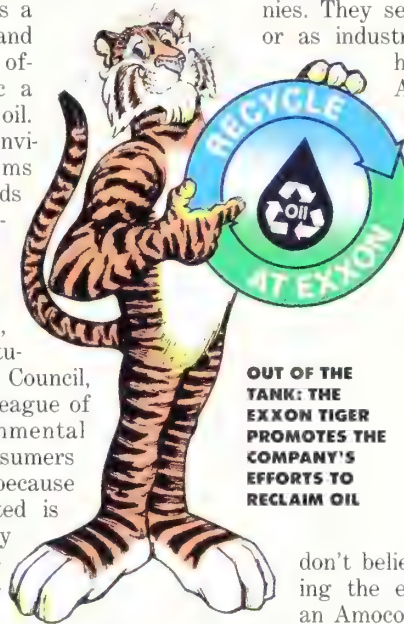
own oil to fuel its refinery in Whiting, Ind., and mixes the used oil with new oil to dilute the lead. When burned, Amoco says, the quantity of lead in the fuel is 2% of the federal standard for home heating oil. "It's a proper use, and we

don't believe it's at all hurting the environment," says an Amoco spokeswoman.

The FTC complaint actually may be just the start of an environmental campaign that is aimed at eliminating lead from used oil—just as it has been taken out of gasoline. "Your body doesn't excrete lead," says Jacqueline M. Warren, a lawyer for the Natural Resources Defense Council.

Eliminating lead from used oil is no easy job, since there aren't enough re-refineries to handle the task. A tough new law could force Exxon Corp., Amoco, and the rest to remove the lead, but they would resist. For now, environmentalists may have to settle for a tad more truth in advertising.

By Peter Hong in Washington



determine how much of a risk exposure to hazardous waste sites poses. Indeed, the NRC said the cleanup of some sites may "create more of a hazard than would be caused by leaving such materials undisturbed."

When Congress takes up the law's reauthorization next year, it undoubtedly will look at proposals for cleaning up Superfund. American International Group Inc., a giant New York-based insurer, has one: It wants to free companies from liability for past pollution and set up a Superfund trust financed through a 2% surcharge on all commercial insurance premiums. The company estimates the levy could raise \$40 billion in the next decade—far more than the \$1.4 billion a year the oil-and-chemical-industry tax brings in. Legislation "should focus on getting the cleanup done and not creating lawsuits," says AIG Chairman Maurice R. Greenberg.

PENTAGON WASTE. But few companies will back a plan run by the insurance industry, even if it could help drain the legal swamp. Industry would rather see a tax on waste, which would raise revenues while discouraging pollution. Executives also argue that Uncle Sam shouldn't be let off the hook: The government is among the country's most egregious polluters. One good example: When 40 companies were socked with an \$88 million bill to clean up a waste-oil lagoon in New Jersey, some outfits hired investigators who found that the biggest culprit at the site was none other than the Pentagon. The companies in March sued the government, which has not responded yet.

Superfund critics also argue that trying to clean up all the polluted sites is unworkable. "Action needs to be ordered around risk and the technology available to clean up a site," says Michael A. Pierle, Monsanto Co.'s vice-president for health, safety, and environmental affairs. He favors dividing Superfund sites into three categories. Those that can be cleaned up with existing technology would be handled first. High-risk sites that can't be fixed economically would be sealed off. And low-risk sites that can't be fixed with existing equipment would be left alone until new technologies are developed.

Nearly all of the contentious constituencies acknowledge that there's one simple lesson from the mess: More money should be spent on research and less on court battles. And on this much, everybody agrees: Sticking with the current law, a contradictory bundle of good intentions wrapped in legalistic liguine, is no solution to the nation's toxic waste.

By Peter Hong in Washington, with Michele Galen in New York

THE BOARDROOM



A GROUND SWELL BUILDS FOR 'NONE OF THE ABOVE'

Angry investors' new tactic: Abstaining in corporate-board elections

What do New Hampshire Republicans and Connecticut Democrats have in common with America's shareholders? Plenty. This proxy season, investors, like fed-up voters, are raring to send a message. Where corporate performance is poor, pay excessive, or management unresponsive, they want change, even to the point of throwing out the bums—not just insiders, but independent directors, too.

Dislodging corporate directors, however, is even harder than defeating political incumbents—it's well-nigh impossible. Shareholders generally are offered only one slate of candidates, and they can vote no only by withholding votes from would-be board members.

BREAKTHROUGH YEAR? No matter. Protest is the point this mean proxy season. Colorado's Public Employees' Retirement Assn., for example, is hardly an activist investor, never even having sponsored a resolution. But this year, the \$11.5 billion fund is withholding votes from directors at American Express, Occidental Petroleum, Travelers,

Westinghouse, and Unisys—thus far.

Withholding votes is a new tactic, so it may not get a true test of power this year. The idea gained appeal after the executive-pay flap spilled onto the front pages in January, radicalizing a lot of shareholders. Colorado didn't disclose its intent to deny votes to directors until Apr. 14. That's one reason that AmEx's board slate on Apr. 27 won 96.9% of the proxies voted, vs. 98.3% last year. Directors at companies where shareholder dissatisfaction is more widespread—Sears, Roebuck & Co., for one—may not fare as well. If 10% to 20% of votes are withheld, any board is likely to be shaken. That's a real possibility as the idea catches on among more big investors—next year if not this.

Some experts even see 1992 as a breakthrough for activism. "This season marks the beginning of a new governance process," declares John Pound, an economist at Harvard University's John F. Kennedy School of Government. "We're seeing the real seeds of what will happen in the post-takeover era."

WHAT'S ON THE BALLOT: SAMPLING OF SHAREHOLDER RESOLUTIONS

	Deduct \$1,000 from directors' annual \$25,000 fee for each board meeting missed
AT&T	Cap total compensation of executive officers at no more than 20 times the pay of the average company employee
DIGITAL EQUIPMENT	Establish a nominating committee composed of outside directors
3M	Disclose terms of severance packages issued to departed executives
IBM	Prohibit golden parachute payouts if return on equity was less than 8% in each of the three preceding years
INVESTOR RESPONSIBILITY RESEARCH CENTER	Create and fund a three-member shareholder advisory committee
DIGITAL DYNAMICS	Require the board to be composed of a majority of independent directors
IBM	Create a compensation committee made up exclusively of outside directors
	Split the job of chairman and CEO

INVESTOR RESPONSIBILITY RESEARCH CENTER, INSTITUTIONAL SHAREHOLDER SERVICES INC., BW

Until recently, activist shareholders haven't focused very much attention on directors, even though they supposedly represent shareholders. Instead, the activists' primary weapon has been the shareholder resolution, usually aimed at pernicious corporate-governance policies—asking companies to adopt confidential proxy voting, for instance, or to redeem poison pills. Past proxy seasons saw battles for outright control of a company, with dissidents offering a slate of directors to replace a board.

PUBLIC OUTRAGE. This year, there are few contests for control. But there are a lot of contests for influence, and that's prompting the votes against directors. Says Sarah A. B. Teslik, executive director of the Council of Institutional Investors: "I've urged members to use it as almost the exclusive vehicle this year."

Although many funds are mum about such plans—partly to avoid any chance of infringing federal rules that prohibit the solicitation of votes without formal disclosure filings—some have stepped forward. The \$68 billion California Public Employees' Retirement System

(CalPERS) is withholding votes from directors at IBM and Sears, among others. The Wisconsin Investment Board is doing the same at Westinghouse (page 80). And the New York City Employees Retirement System (NYCERS) is one of many funds expected to vote against Champion International Corp.'s directors. Those corporations already have company (table)—and are likely to have plenty more.

Withholding votes from directors isn't the only weapon angry shareholders are brandishing. Wisconsin, NYCERS, and others continue to offer resolutions (table). This year's most notable ones try to tackle executive pay, since for the first time the Securities & Exchange Commission allowed proposals on the subject.

Surprisingly, those resolutions have garnered few votes. A move to cap pay at Baltimore Gas & Electric won 13% of the proxies voted, while the proposals at Bell Atlantic and Equimark got about 16.5%. The vote for other governance resolutions usually reaches 28% to 44%.

But again, the results may not be a fair gauge of shareholder sentiment. The SEC decision came in February, past the filing deadline for most companies. The resolutions that made ballots were all offered on speculation last fall by individuals—and struck many institutions as too arbitrary. "We don't think shareholders should meddle in the details of compensation," says James E. Heard, president of Institutional Shareholders Services Inc. "I prefer to see

them focus on pay structure, disclosure, and accountability." One intriguing proposal, at Grumman Corp., asked that no cash bonuses be paid to management until the company's stock returned to 1986 levels. It was disallowed on technicalities but may be back in 1993—along with other carefully crafted measures.

INCOMING TIDE. Shareholder anger shows up in other votes, too. Stock, option, and bonus plans are getting careful scrutiny, especially at companies that reduced cash compensation but made up the difference—or more—with generous stock plans. Marriott, Adobe Systems, and Warner-Lambert are among the companies whose plans may face nay votes. "People are voting not only against the plans but also against the boards that approved the plans," says A. Camille Nichols, president of Investors' Fiduciary Services Inc.

The struggle for influence over the board doesn't end there. A new resolution filed by NYCERS asks Sears to elect a chairman separate from the chief executive. NYCERS also wants the compensation committee at Reebok International Ltd. to be composed entirely of outsiders. Ditto for the nominating committee at Digital Equipment Corp. At General Dynamics and Wang Laboratories, shareholders just want a majority of outside directors on the corporation's board.

There's no question that activists have hardened their determination to force corporate change. Again and again, they've voted in big numbers for resolutions, only to be ignored. Yet they've recently eked out some small victories—voluntary acceptance of confidential voting, for example. And they won two big ones: Last July, Time Warner Inc. replaced a controversial stock offering with a more palatable one; in March, General Motors Corp.'s directors staged a boardroom coup. "I see all of this as a wave that's building," says New York City Finance Commissioner Carol

O'Cleireacain, chairman of NYCERS' board. "What happened at General Motors would not have happened if we hadn't put in place the steps of previous years—confidential voting, a majority of independent directors, and so on. That's why we keep sponsoring resolutions." And it's why activists keep trying new tactics, too. For angry investors, the status quo will no longer do. By Judith H. Dobrzynski in New York

THE SILENT TREATMENT

Where shareholders are withholding votes from directors:

Company	Shareholder complaint	Company	Shareholder complaint
AMERICAN EXPRESS	Poor performance	OCCIDENTAL PETROLEUM	Poor performance
CHAMPION INTERNATIONAL	Poor performance, excessive pay	SEARS	Poor performance, unresponsiveness to shareholders
DIAL	High pay, unresponsiveness to shareholders	TRAVELERS	Poor performance
IBM	Excessive executive pay	UNISYS	Poor performance
		WESTINGHOUSE	Overly generous stock-option plan

DATA: INVESTOR RESPONSIBILITY RESEARCH CENTER, INSTITUTIONAL SHAREHOLDER SERVICES INC., BW



WASHINGTON'S SHERATON CARLTON: THE CHAIN IS SCALING DOWN ITS PRICE LIST

THE LATEST MAD PLUNGE OF THE PRICE SLASHERS

Grabbing for market share, many companies will keep cutting awhile

Price wars aren't unusual, but in the early stages of economic recovery, they're about as common as World Series play at Wrigley Field.

Solid evidence of a sustained economic upturn came on Apr. 28, with the Commerce Dept.'s report on real gross domestic product: It expanded at a 2% annual rate in the first quarter—the fourth consecutive advance in GDP. But it seems as if Corporate America hasn't heard of the recovery's arrival: Companies from candymakers to hotel chains are still slashing prices.

GILDING THE LILY. Winn-Dixie Stores Inc. is the latest to enter the fray. The largest grocery chain in the Southeast said on Apr. 28 that it will cut prices on thousands of items in its 1,200 stores. The move is aimed at building market share. Says a Winn-Dixie spokesman: "Our customers respond to pricing."

The current price wars are gilding an inflation outlook that has already been brightened by low money-supply growth and weak wage increases. According to DRI/McGraw-Hill, the core rate of inflation—consumer prices excluding the volatile swings of food and energy—should increase by only 3.6% by the end of this year, and just 3.5% in 1993 (chart).

What's moderating price hikes? Jeff K. Thredgold, chief economist at KeyCorp., a bank holding company, credits the lack of new jobs and low income

growth, which had depressed consumer spending. Until last quarter, he argues, consumers didn't believe a recovery had started. "Statistically, the recovery may be a year old," Thredgold says, "but emotionally, it is only two or three months old."

So, to stoke demand, companies are slashing prices. "Competitive pressures are so intense that companies are more

interested in maintaining market share than in achieving price increases," says Edward E. Yardeni, chief economist at C.J. Lawrence Inc. And the surest way to draw customers is to offer bargains. "The only growth in real spending is coming from where consumers are getting the most bang for their bucks," says Robert T. McGee, an economist at Tokai Bank.

Take the travel business. The recession slammed spending on tourism. Indeed, domestic air travel fell 2.3% last year and ran flat in this year's first quarter. To try to turn the tide, American Airlines Inc. launched a new price structure in early April, reducing fares by as much as 38%. American's rivals quickly responded in kind.

Next came a skirmish at car rental agencies. Alamo Rent-A-Car Inc., based in Fort Lauderdale, Fla., introduced its Great American Rates, which cut prices on economy, midsize, and luxury cars as much as 55%. Donald C. Moonjian, Alamo's vice-president for marketing, describes the cuts as a way to "jump-start" demand. Not to be left out, rental leader Hertz Corp. responded by chopping its daily rate on subcompacts.

In the hotel industry, ITT Sheraton Corp. checked in with SureSavers rates at all U.S. and Canadian Sheraton hotels. The move is an attempt to placate irritated guests who searched for bargains hidden within the hotel chain's complex price list. The motivation for the new, four-tiered list was simple, says Robert F. Cotter, senior vice-president: "Customers want it."

CANDY LAND. Even sweet-toothed consumers can enjoy a bargain. In a nip-and-tuck battle for market share, Hershey Foods Corp. and M&M/Mars Inc. are taking aim at consumers with price cuts and refunds. In early April, Mars cut wholesale prices on bags of M&M candies by 6.5% to 11%, leading some retailers to slash as much as 40¢ off the price of 1-lb. bags and sell them for \$2.49. Mars landed a second blow by running newspaper ads offering candy eaters \$1 in exchange for 20 candy-bar wrappers. Caught short, Hershey has so far refused to lower its list prices. But in late April, it did match the refund offer, boosting its nickel-a-bar give-back with coupons for free candy.

The few companies that tried to raise prices as the recession waned now find themselves slashing again. Steelmakers, for example, had to abandon the 3%

price increases they announced in January. And while tire companies hoped to inflate their prices by 4% to 8% last fall, the average increase ended up closer to just 2%.

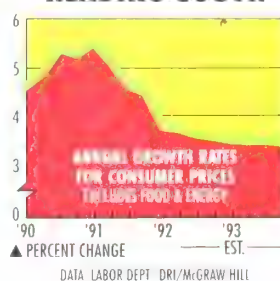
Of course, there are a few sectors, including the auto business and health care, where price hikes are still the norm. And the red-hot price war between telephone

companies looks as if it is cooling at last (page 46).

Yet many economists figure the general price-cutting won't stop until the second half, when the recovery is supposed to gain speed. Now, if the Chicago Cubs could just make it to the Series.

By Kathleen Madigan in New York, with Joseph Weber in Philadelphia, Geoffrey Smith in Boston, and bureau reports

INFLATION KEEPS HEADING SOUTH



JACK SMITH IS ALREADY ON A TEAR AT GM

Three weeks after being made COO, he is ramming through big changes

Jack Smith knows what a makeover means. A few years back, he overhauled General Motors Corp.'s European subsidiary, turning a perennial money-loser into a big profit generator. And while trimming the corporate fat, Smith didn't spare his own: He shed 40 pounds, thanks to a diet featuring apples-only lunches. Then, he found a Swiss wife who spiffed up the Worcester (Mass.) native's drab wardrobe. When he left GM-Europe's Zurich headquarters in 1988, Smith called the staff into the canteen and declared that his stay in Zurich had transformed his life.

Now, Smith is starting to perform a similar makeover on all of General Motors—*tout de suite*. On Apr. 24, he demolished the corporate organization put in place in 1984 by former Chairman Roger B. Smith, cramming GM's money-losing, three-unit North American auto operation into a single entity that he hopes will be nimbler. Jack Smith's boss, Chairman Robert C. Stempel, had unveiled the new organization in February—but said it would take up to two years to implement. Smith made it effective May 1. He also plans an offering of up to \$2.9 billion in new stock to bolster GM's eroding capital position.

URO-LESSONS. The changes come only three weeks after John F. Smith Jr. became GM's president and chief operating officer in a boardroom revolt. His mandate: fix GM, but fast. Despite taking a previously scheduled vacation from Apr. 7 to Apr. 24 (table), he has already ensured that GM will never be the same. And the unexpected first-quarter profit of \$179 million that GM reported on Apr. 28—up from a \$144 million loss in 1991's

first quarter—can only give him heart.

As he charts GM's new course, Smith is drawing on lessons he learned in Europe. A known hater of bureaucracy, he quickly set up the headquarters of the new North American operation he is creating in Warren, Mich., 10 miles from meddling bean counters in Detroit—and in a building too small to allow much expansion. That's a page out of the GM-Europe book: Its head office was in neutral Zurich, where the difficulty of getting work visas kept staff from ballooning.

Now comes the hard job of getting new management in place—and cutting costs at top speed. Smith already has named a key former European aide, J. Ignacio Lopez de Arriortua, as vice-president for worldwide purchasing. His job is to make huge staff cuts at GM's bloated purchasing operation by collapsing it from five units into one. Darrel Hampton, a vice-president with United Technologies Corp.'s auto-parts unit, calls that "a very positive move and long overdue."

Meanwhile, Smith is huddling with vice-presidents, looking for ways to put the dogs in GM's car lineup out of their misery. According to the newsletter *Fast Track News*, five GM car models are stacked up on dealers' lots in over 100 days supply—way above the industry norm of 65 days. GM watchers expect Smith to stop wasting dough on the slow movers.

Smith's revved-up reorganization also will force a culling of GM's bloated

white-collar ranks. GM is offering attractive early-retirement terms to workers as young as 51—with a tight June 1 deadline. With the pressure on, many managers will probably take the buyout, so you can bet that GM will meet its 1992 target of 9,000 fewer salaried workers, a 10% cut, by mid-year. If more cuts are needed, Smith has never hesitated to hand out pink slips.

LONGER DAYS. As the bureaucracy shrinks, Smith will be hacking at manufacturing costs. He is looking for quick sales of nonessential units such as GM's Allison Gas Turbine Div. Insiders also say he's planning to accelerate Stempel's previously announced plan to shutter 21 GM plants by 1995. This summer, for the first time, GM will put a U.S. plant on a nearly around-the-clock, seven-day schedule. That's another European wrinkle. Smith pioneered a similar move while he was in Zurich.

His next step will be to drive accountability down into the ranks. With his soft, New England voice, Smith seems laid-back. But when he delegates authority, he expects to get results pronto.

He's not the type to have his secretary call ahead, either. "He'll call the guy [who is] responsible himself and want a three-minute answer immediately," says Lehman Brothers analyst Joseph Phillippi.

How long before all this pays off? Smith has clearly been mulling his moves since being passed over as president two years ago. But he knows that a comeback may take several years, as it did in Europe. Asked once what made the European turnaround work, Smith replied: "Everyone was sick of struggling." A lot of GMers must feel that way today. Now, it's just a question of who can keep up with Jack Smith.

By James B. Treece in Detroit, with John Templeman in Bonn



SMITH: CHOPPING THE BUREAUCRACY

PUTTING GENERAL MOTORS INTO OVERDRIVE

FEB. 24 GM Chairman Robert C. Stempel unveils plans to reorganize GM's North American auto operation into a single unit by 1993 or 1994



APR. 6 Prodded by the board's worries over the laggard pace of GM's recovery plan, Stempel demotes Lloyd E. Reuss and names John F. Smith as president

APR. 7 Smith names Robert W. Hendry, the just-appointed head of GM's Mexico unit, as GM North America's finance chief

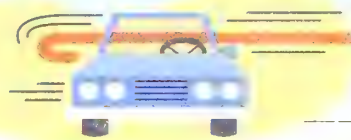
APR. 15 Smith sets up North American headquarters in Warren, Mich.—10 miles from the stifling bureaucracy of GM's Detroit headquarters

APR. 17-24

Smith takes a previously scheduled vacation



APR. 24 Smith aims to make the reorganization effective May 1, not by 1993. He reassigns top executives and may soon cut models from GM's bloated lineup



DATA BW

CAN THESE GUYS REVIVE MACY'S?

Now the heat from the store's big-name board is on its new co-CEOs

Mark S. Handler, Macy's new co-chairman and CEO, looks a lot like his former boss, Edward S. Finkelstein. Like Finkelstein, Handler is partial to spread collars, custom suits, and aviator glasses. Handler, who in high school briefly considered a career as a comedian, now speaks in Finkelstein's measured tones, too.

But Handler would do well to distinguish himself from his old buddy and longtime mentor. After months of rumors that R.H. Macy & Co.'s board wanted Finkelstein out, the embattled CEO resigned on Apr. 25. Now, it's up to Handler and his co-CEO, Myron E. "Mike" Ullman III, to chart a new course for the retail giant, which has been in a Chapter 11 reorganization since January.

The two men know better than almost anyone how difficult that task will be. Clearly, they have not yet settled into their new roles. Standing just a few feet away from Finkelstein's darkened office, still decorated with pictures of the former CEO's family, Ullman and Handler stiffly pose for a photographer, then remove their jackets and settle at one end of the long wooden table that dominates Macy's boardroom.

LESS SCREAMING? They acknowledge that their two-man approach is unusual. Says Handler: "This partnership may not be made in heaven, but we think it would work very well. The lines [of responsibility] are relatively clear and delineated." But if there is to be a first among equals, it may be Ullman. It's he who led a discussion of where Macy's is headed, and he's eager to talk about the consumer focus groups the store has been conducting. Macy's, it seems, is not a browser's store. "Sixty-five percent of people surveyed say they come to the store because they need something," says Ullman, regardless of

whether there's a sale on. That finding could result in a change of strategy, since Macy's has been running a different promotion almost every week lately. "Perhaps we'll scream less: 'Sale, sale, sale!'" says Ullman.

That's not the only merchandising strategy subject to revision. "There will have to be reshaping of where they want to go," says Leonard Lauder, CEO of Estée Lauder Inc., a large Macy creditor. "Do they want to be an upmarket department store, or do they want to go back to the old Macy's: 'Pile it high and let it fly!'"



ULLMAN AND HANDLER MUST SOLVE THE RETAILER'S IDENTITY CRISIS

WHAT MACY'S MIGHT DO NOW

DUMP PROPERTIES

Despite management's denials, I. Magnin and Bullock's could be sold to a California retailer, such as Carter Hawley Hale

CLOSE STORES

Some 10% of Macy's 120 stores could be shuttered

EXPAND MACY'S CLOSE-OUT STORES

Similar to Nordstrom's 'Rack' outlets, these stores are posting encouraging results

REFINE MERCHANDISING STRATEGY

Retailing insiders speculate that Macy's may return to its roots as a bargain emporium. And the store's new management is reexamining its private-label strategy

The old Macy's also emphasized well-known, national brands. By contrast, Finkelstein plunged deeply into private-label goods—which now make up 15% to 20% of Macy's merchandise—in departments from housewares to men's shoes. Ullman and Handler are reexamining that approach. Although it has had some success, there may just be too much private-label merchandise in the mix, suggests Lauder. "Probably the most immediate change you'll see is more emphasis on branded goods."

'MAKES SENSE.' Even bigger changes may be ahead on the financial side, perhaps as early as this summer. Although board members aren't talking, one Wall Street theory has it that those directors who hold preferred stock—Hong Kong investor Sir Run Run Shaw, CBS Chairman Laurence A. Tisch, mutual-fund manager Michael F. Price, developer Alfred Taubman, and General Electric Capital—could buy up Macy's bonds in the open market after prices start to fall, then negotiate for ownership. "They'll wait until people start to take Macy's off their radar screens," says Jack Hersch, a bankruptcy analyst at Lehman Brothers. Or, he suggests, preferred shareholders may inject money directly into Macy's to help cut its \$5.1 billion debt. In exchange, they'd ask for a controlling equity stake.

Another alternative could involve Zell/Chilmark Partners, whose debt holdings give it effective control of Carter Hawley Hale Stores Inc., also in bankruptcy proceedings. Chicago moneyman Sam Zell may be interested in buying Macy's California chains, I. Magnin Inc. and Bullock's Inc., and merging them into Carter Hawley. Zell and David Schulte, Chilmark's lead partner, didn't return calls, and Ullman and Handler deny that such asset sales are in their five-year plan. Still, "the Zell idea makes sense," says a board adviser. "But just because it makes sense doesn't mean it's going to happen."

Macy's board and creditors are waiting none too patiently for the retailer's luck to turn. Ullman and Handler know that if they don't want to share Finkelstein's fate, they had better start making sense fast.

By Laura Zinn in New York

DATA: BW

The printer with a split personality.



© 1992 Hewlett-Packard Company. *Suggested U.S. list price: PE12292

The HP DeskJet 500C.
Prints crisp black &
white and color for only
\$1,095.*

Sometimes the Hewlett-Packard DeskJet 500C is a black and white printer. Smart-looking, formal, very businesslike. And because it's a Hewlett-Packard inkjet printer, it gives you laser-quality printing with clean, crisp type and graphics. For a very logical price.

But other times the DeskJet 500C is a color printer. Just snap in a cartridge and check out its wilder side. Get the same clear, sharp print quality. But in color. Choose from thousands of different shades to really make your proposals and presentations come to life.

Get the HP DeskJet 500C for PCs or the DeskWriter C for Macintosh. Both

come with HP's three-year limited warranty. They print on plain paper or transparency and work with all the popular software. They're easy to use and small enough to fit on your desk.

To see a demonstration of how the DeskJet 500C or DeskWriter C can add some personality to anything you print, call **1-800-552-8500, Ext. 3069** for a print sample and the name of the authorized HP dealer nearest you.



**HEWLETT
PACKARD**

MORRIS SMITH, WE HARDLY KNEW YE

He's leaving Magellan, making way for an aggressive new manager

Morris Smith sure didn't last long as manager of the nation's largest mutual fund. After two years running Fidelity Investments' famous Magellan Fund with spectacular results, the 34-year-old investment whiz suddenly up and quit on Apr. 29.

He swears he's not burned out from his role as the single most visible portfolio manager in America. He says he's leaving for the same reason his predecessor, investment guru Peter Lynch, left in April, 1990: to spend more time with his family. "I've always had my career completely mapped out ahead of me, and now I just want to have some time for myself," Smith says. An Orthodox Jew, he will spend next year living in Israel with his wife and four children, catching up on James Michener novels. "He's my favorite writer," he says, "and I haven't had time to read a single one of his books since 1982."

SAME FORMULA. While Smith curls up with a big book, the hot seat goes to Jeff Vinik, Smith's 33-year-old successor. It took Fidelity Chairman Edward C. "Ned" Johnson III about a minute to pick Vinik for the job. Like Smith two years ago, Vinik is another little-known star in Fidelity's stable of managers. Since 1989, he has run two different funds, Contrafund and Growth & Income, producing results in the top 10% of his peer group at each one. "Vinik has had shoot-the-lights-out performance with both of his funds," says Don Phillips, publisher at mutual fund tracker Morningstar Inc.

Despite Vinik's rising-star reputation, Fidelity prepared for the possibility that investors might be heading for the exits once they knew Smith was, too. In the week before his departure was made public, Smith boosted the fund's cash position to 10%, about \$2 billion, from its usual 3%, as Lynch had before he resigned.

In the end, the precaution may not have been necessary. Analysts figure that Magellan

can again change managers successfully. Smith is staying until July to help Vinik get started, and Vinik says that when he takes over, he'll run the fund along the lines laid down by Smith and Lynch. "I like a bottom-up, company-by-company approach, much like Morris and Peter," he says.

Vinik has not one, but two tough acts to follow. Lynch is an investment legend, ending his 13-year career at Magel-

lan, Investment Company of America, with \$11.4 billion in assets.

Since he came to Fidelity, Vinik has shown a magic touch. He studied engineering and economics as an undergraduate at Duke University, then worked as a stock analyst on Wall Street before going to Harvard business school. In 1986, one year out of B-school, he joined Fidelity as manager of its Select Energy Services Fund. Within two years, he became an assistant to Lynch on the Magellan Fund. In January, 1989, he was named manager of the Contrafund, which specializes in out-of-favor stocks, and in the next two years produced a total return of 34.5%, vs. 10.2% for the S&P 500. In October, 1990, he took over the Growth & Income fund and through March, 1992, returned 55.3%. The S&P 500 rose 38.58% during that time.

While Vinik says he takes after Lynch and Smith when it comes to investing, some think he's racier. "He was too aggressive for me" running the Growth & Income fund, says Erik Kobren, who publishes a newsletter exclusively on Fidelity funds. Vinik bet heavily in narrow sectors of the economy, putting about a quarter of the fund's assets in health care and technology stocks, an unorthodox strategy for a balanced growth-and-income fund. Just the same, Kobren can't argue with Vinik's results. Morningstar's Phillips says Vinik "doesn't have a

lot of patience for weak stocks" and tends to sell losers quickly. Morningstar editor John Rekenhaller, calls Vinik a "manic" trader. Indeed, the turnover rate of Fidelity Growth & Income Fund's portfolio was 215%, against an average of 85% for its peer group.

Magellan's 1 million or so investors will be watching Vinik closely. Many of them must be wondering how long he can last. Vinik says he's "in it for the long haul"—at least five years. And he says he'll continue leaving the office at 5:30 p.m., limiting workweeks to 60 to 65 hours. "My family was the first thing I thought about when I was approached about the job," he says. "I feel like I can handle it—stress is part of the job." Still, it's too bad for Vinik that Smith takes off on July 1 and not a few weeks later. Vinik's wife, Penny, is expecting baby No. 2, a boy on July 2.

By Geoffrey Smith in Boston



SMITH SWEARS HE'S NOT BURNED OUT AND SAYS HE'S RESIGNING FOR THE SAME REASON INVESTMENT GURU PETER LYNCH LEFT IN APRIL, 1990: TO SPEND TIME WITH HIS FAMILY

lan with a 2,461% total return, vs. 508% for the Standard & Poor's 500-stock index. Since he was at it for a much shorter time, Smith's results aren't as spectacular, but they were among the best of the nation's 10 largest equity funds. From May 31, 1990, through Apr. 23, the fund's return was 28.9%, vs. 21.27% for the S&P 500. And during Smith's brief stint, Magellan's assets ballooned from \$13 billion to \$20 billion, well ahead of the second-largest U.S.

MAGELLAN'S NEW SKIPPER: JEFF VINIK

BORN March 22, 1959, Deal, N.J.

EDUCATION Duke University, 1981; Harvard business school, 1985

PRIOR WORK EXPERIENCE Equity block trader, First Boston, August, 1985-May, 1986

FIDELITY CAREER PATH Joined in 1986 as an analyst, then assisted Peter Lynch at Magellan. January, 1989-September, 1990, managed the Contrafund. October, 1990-present, managed Growth & Income Fund

PERSONAL Married, with one child and another on the way

DATA: FIDELITY INVESTMENTS, INC.

**WE HAVEN'T CHANGED
OUR POSITION ON
WORKERS COMPENSATION
IN OVER 50 YEARS.**

HOW THE USW HIT MARC RICH WHERE IT HURTS

The union aroused global labor support, crimping his expansion efforts

When 1,700 unionized steelworkers were replaced permanently at Ravenswood Aluminum Corp. in 1990, it seemed like yet another sign of organized labor's relentless decline. The union's battle appeared all the more lopsided after it discovered that the Ravenswood (W. Va.) aluminum producer was controlled by Marc Rich, the billionaire fugitive whose commodities-trading empire spans 40 countries.

But in an unprecedented global campaign that's likely to be emulated by other labor groups, the United Steelworkers enlisted foreign unions to force Rich's hand. The final straw came when East European unions disrupted Rich's expansion efforts in Czechoslovakia, Romania, and Russia. Soon after, on Apr. 20, a top Rich employee who owns most of Ravenswood's stock kicked out the aluminum producer's chairman and replaced him with another Rich associate. The company then agreed to restart contract talks with the union. Crows USW Vice-President George F. Becker: "We used the power of the union to force them to the bargaining table."

As for Rich, he did not return calls to his office in Zug, Switzerland, where he has been hiding since he fled the U.S. nine years ago, ahead of a 65-count federal indictment for criminal tax evasion.

NEEDLEWORK. How did a declining union such as the USW force Rich to cry uncle? Once the union identified privately held Marc Rich & Co. as the behind-the-scenes investor of Ravenswood, it aimed a spotlight on Rich. First, the union sent delegations to eight European countries where Rich deals in everything from aluminum and magnesium to oil, often in contracts involving government agencies. The delegations, which included locked-out employees, cast Rich as a scoundrel responsible for the suffering of American workers. Unionists handed out "Wanted: Marc Rich" flyers at the

London Metal Exchange and got pro-labor politicians in the European Parliament to needle Rich.

The turning point seems to have come after the USW's success in Eastern Europe and Russia, says Joseph B. Uehlein, an AFL-CIO official who was a prime architect of the campaign. After Rich bid for the Slovak State Aluminum Co. last year, Czech unions pressured the government to reject the offer. In Bucharest, Romania, unionists challenged

seized the 20% stake held by another investor, Charles E. Bradley of Connecticut. In 1990, Bradley had pledged his shares as collateral against a \$12 million personal loan he got from a Strothotte-owned company. Although Bradley fell behind on his payments last year, Strothotte waited until now to move.

This gave him voting control over Ravenswood Chairman and Chief Executive R. Emmett Boyle, who owned 27% of Ravenswood. Strothotte then replaced Boyle and Bradley with two fellow Rich associates. One of them, Craig A. Davis, became chairman. Strothotte, Boyle, and Bradley didn't return phone calls seeking comment. But in a letter, Boyle accused Strothotte of "permitting the notorious fugitive from justice, Marc Rich, and his associates to seize control of [Ravenswood] by packing its Board of Directors with Rich cronies."

DEFAULT. The new board will find it difficult to fix the mess at Ravenswood. Because Boyle refused to settle with the union, the USW also targeted the company directly. The union persuaded Anheuser-Busch, Miller Brewing, and Stroh Brewery not to buy Ravenswood's aluminum sheet used in cans. Revenues at the company skidded to \$491 million in 1991, from \$701 million in 1989. The once profitable company last year defaulted on \$71 million in debt, and banks cut off its revolving credit line. Ravenswood's auditors concluded that there was "substantial doubt about [the company's] ability to continue as a going concern."

This could make the USW's victory a Pyrrhic one for the strikers. Even

if Ravenswood can somehow bring them back—difficult, since it has legal obligations not to fire the 1,000 replacements Boyle hired—the plant could be financially strapped for years.

However, other aluminum makers may not repeat Boyle's tactics soon. The USW has shown how unions can pressure multinationals by securing help from their still-strong fellow unionists abroad. Indeed, the United Auto Workers, which just faced threats of permanent replacements from Caterpillar Inc., has begun a similar campaign. If U.S. unions can follow the USW's lead, they may have hit on a fearsome weapon.

By Maria Mallory and Michael Schroeder in Pittsburgh



Rich, left, and the USW's Becker: The union played hardball, even handing out 'Wanted' flyers

Rich's recently acquired stake in the Athenaeum Palace Hotel and got thousands to boo his name at a political rally in February after making him an issue. The USW campaign prompted officials in Russia to question his oil-trading practices there when he recently tried to expand them. "An international picket line was created around the Rich operation," explains Marcello Malentacchi, general secretary of the Bonn-based International Metalworkers Federation. "It was embarrassing for him."

These moves seem finally to have convinced Rich that the USW would keep up the pressure. On Apr. 11, Willy R. Strothotte, a top Rich associate in Zug who controlled 48% of Ravenswood,

LIBERTY MUTUAL LEADER IN WORKERS COMPENSATION SINCE 1936.

Liberty Mutual has been the leading writer of workers compensation for over 50 years.

It's a position we've earned by working with our customers on the issues that matter most: controlling workers compensation costs through innovative loss prevention and effective claims management.

COST REDUCTION THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is analyzing the causes of workplace injuries to improve occupational safety. For our customers, that research means Liberty's 750 local loss prevention specialists provide leading edge safety consultations, including ergonomics and customized safety programs.

COST CONTAINMENT THROUGH CLAIMS MANAGEMENT

When an employee is injured on the job, we apply unmatched experience to provide the most appropriate medical treatment, and return that person to work as soon as possible.

That's because managed care has been our strong suit for decades. We pioneered return to work programs. We have the only rehabilitation center of its kind in the industry. Our groundbreaking program of panel physicians was a forerunner of today's Preferred Provider Organizations (PPOs). Now LibertyPREFERRED CARE is one of the industry's most effective nationwide

PPO networks. Our medical cost containment programs saved our customers over \$170 million last year.

Fighting fraud through innovative programs, like special investigative units, is another important way we work to control costs.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As the industry's leader, we're working together with our customers and their trade associations, state legislators and labor in the fight for reform. And we'll keep working with them until workers compensation accomplishes its mission: helping injured workers return to work by assuring quality medical care and fast benefit payments.

At the same time, meeting the needs of our customers in difficult states requires innovative solutions. That's why we pioneered a large deductible policy. For self-insured employers, we expanded our Helmsman services with flexible plans.

THE DIRECT WRITING ADVANTAGE

Our leadership position demands a passion for service. As a direct writer, we can more readily provide the service customers need because partnership is built into the way we do business. By working together, we can more effectively control costs.



FACING THE ISSUES THAT FACE OUR CUSTOMERS



THE RONKINS: THEY HAVE RESIGNED, AND THE SEC HAS FROZEN THEIR ASSETS

COLLEGE BOUND: AN 'F' FOR CONDUCT?

The SEC charges fraud as the test-prep outfit nears collapse

In the end, Janet Ronkin just couldn't bring herself to tell the truth. Toby Rose, director of College Bound Inc.'s Miami-area centers, called her at home on Apr. 23 to ask whether she and her husband, George, had resigned from their respective jobs as president and chairman of College Bound, after being charged with civil fraud by the Securities & Exchange Commission. Ronkin denied it. Then she hung up.

Moments later, Ronkin called back. She admitted that she and George were resigning from the college-test-preparation company but said she had hoped to keep the news quiet until after a week-end engagement party for her son. And she denied to Rose, who had just bought more than \$4,000 in College Bound stock, that the SEC's charges were true. "I was totally used and abused and mutilated," says Rose. "I'm totally angry."

College Bound is now near complete collapse after an Apr. 29 filing for bankruptcy protection. That action followed a move by the SEC on Apr. 28 to freeze the Ronkins' assets. The SEC maintains that the Ronkins deposited \$505,250 of College Bound funds into their personal bank accounts and transferred \$624,000 more of College Bound's money into Swiss bank accounts last December.

There's more: In a suit filed on Apr.

23, the SEC contends that the Ronkins inflated College Bound's 1991 pretax income of \$8.7 million by at least \$5.2 million, mostly by funneling money from corporate bank accounts to accounts at its testing centers, then reporting the funds as revenue. The suit also says that this year's first-quarter statements were inflated by misstating receivables. The array of suits caps a months-long SEC investigation, reported in the Feb. 10 issue of BUSINESS WEEK.

SINKING SHIP. Meanwhile, the SEC halted trading in College Bound stock on Apr. 20. The company's New York attorney, Robert W. Berend, and the Financial Relations Board Inc., which handled public relations, have resigned. So has its accountant, Arthur Andersen & Co.

For now, the Ronkins aren't talking, though their current attorney, Morris Weinberg Jr., says "there is a lot that is misunderstood, a lot that has been written that is fiction, but we haven't had an opportunity to address the allegations in the complaint, which we will do in due course." As for freezing the Ronkins' assets, he

says, the SEC is "absolutely wrong" about the money transfers.

It is a long way down for the once high-flying College Bound, which the Ronkins founded in 1985. In 1988, the company went public, by merging with an existing shell company. It raised more than \$30 million from European investors, and its stock started a quick ascent, rising to a peak of \$24 a share last August, from \$4.75 in December, 1990 (chart). The rapid rise caught the attention of short-sellers, who make money by betting that a stock will fall.

By last summer, many shorts were convinced they were onto a sure bet. At the time, several reported calling College Bound's centers, only to find that some of the locations advertised weren't yet open. Others visited centers to find just a handful of students. But College Bound's stock seemed oddly unaffected. The shares would drop slightly on the rumors, then recover quickly.

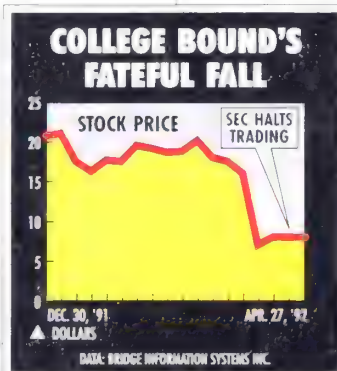
COSTLY SNUB. One short-seller, Valerie McDowell, may have provided the information that helped crack the case. After being "disinvited" to a road show in November to hawk College Bound's latest bond offering, she checked on a College Bound escrow account said to be holding \$15 million. Using the bank account number available on public documents, she called on Dec. 10 to find out the balance and the account activity. To her surprise, the account held just \$6.29 million, and there had been a series of round-number withdrawals. Suspicious, she called an SEC contact.

The SEC was already deep into its own investigation. With a team of eight attorneys, plus accountants, the agency was painstakingly piecing together records of College Bound's bank deposits and receipts. They subpoenaed testing-center directors, who could provide information on activity and revenue.

The SEC's probe appears to be far from over. Recently released court papers show that the agency is also looking into stock manipulation. The SEC contends that as of June, 1991, 84% of College Bound's outstanding stock was held in the names of two Swiss banks.

George and Janet Ronkin used to say, as criticism of College Bound mounted, that they were simply victims of short-sellers. "We're always defending ourselves," George Ronkin told BUSINESS WEEK. Now, it looks as if that was just practice for the real thing.

By Gail DeGeorge in Miami, with Erik Milston in West Palm Beach





**We've Given
Business Flyers
The Best
Frequent Flyer
Program In
The Business.**

**For The
Fourth Year
In A Row.**

At Continental, making a difference means having a frequent flyer program that's second to none.

For the fourth consecutive year, the readers of *InsideFlyer Magazine* voted Continental's OnePassSM the Best Overall Frequent Flyer Program.

In fact, Continental won highest honors in six out of seven categories, including Best Program Customer Service, Overall Rewards Program, Elite-Level Program, Overall Promotion and Program Newsletter.

And with service to over 200 destinations worldwide, there's never been a better time to be a member of OnePass.

There are other reasons why business flyers choose Continental. We're setting new standards of service at ticket and check-in counters, at our gates and baggage claim areas to speed you on your way.

It's all part of our commitment to improve every aspect of flying for you. Continental is making a difference. And that difference is growing every day.

© 1992 Continental Airlines, Inc.

Continental

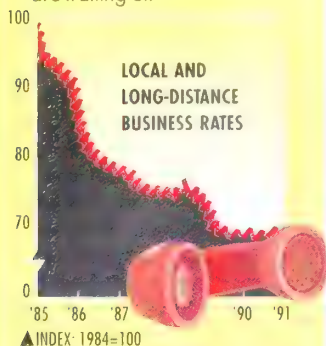


**One Airline Can
Make A Difference.SM**

EDITED BY DEIDRE A. DEPKE

PARTY'S OVER

Competition between phone companies forced a big drop in telephone rates during the 1980s. Now, the price wars are trailing off



Arthur Andersen accountants questioned the company's "ability to continue as a going concern," noting that it was in violation of some loan covenants. To Jacobs, Andersen was overstating the problem. He says that he and investor Carl Pohlad have kicked in \$15 million to help solve the company's cash crunch. He has also raised \$15 million from two private investors and is close to securing an additional \$15 million. Jacobs asks: "Why would I put \$15 million in if I didn't know it was good money?"

PAINTING AN ART MAVEN INTO A CORNER

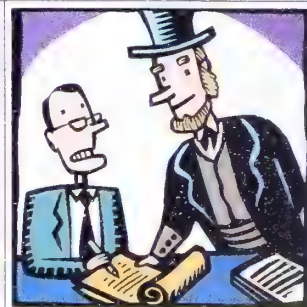
► On Apr. 27, U.S. marshals arrested financier Roberto Polo. They were acting on a Swiss warrant charging him with fraud and embezzlement. Polo, an art collector and once the toast of the international art set, allegedly bilked investors out of \$120 million through his Private Asset Management Group. Efforts to recover the money by selling Polo's artwork brought in just a fraction of the losses.

The Swiss arrested Polo once before, in Italy in 1988. He was released on bail and skipped the country in 1989. Since 1990, Polo has been working as an artist in Miami. He made no secret of his whereabouts, even consenting last November to an interview

GOING METRIC, INCH BY INCH

In what may be the all-time best—make that worst—example of foot-dragging in the history of Washington bureaucracy, the federal government will soon implement a statute that went on the books on July 28, 1866. Last summer, President Bush signed Executive Order 12770, which requires federal agencies to begin using the metric system on Sept. 30.

That means Bush put his name to the bill 125 years after Congress legalized the measurement standard for use in the U.S. and 11 years after it passed the Metric Conversion Act of 1975. Private-sector use of grams, meters, liters, and so forth will still be voluntary, but those doing business with the feds should stock up on those metric conversion kits. The law says Uncle Sam will use metric measures even in "procurements, grants, and other business-related activities." For noncompliers, a miss is as good as 1.61 kilometers.



GOING BACK: MORE TRADE WITH VIETNAM

► Just 10 days after lifting a ban on direct communication links with Vietnam, the State Dept. took two more big steps on Apr. 29 toward easing the 17-year U.S. embargo on trade with Hanoi. In a move that will benefit American pharmaceutical companies, the U.S. government will now permit sales of medical supplies and other goods that meet human needs.

The Bush Administration is also lifting all restrictions on private and nonprofit volunteer groups' activities in Vietnam. The Administration's actions came in response to increasing cooperation by Hanoi in accounting for missing U.S. soldiers.

IRV JACOBS KEEPS MINSTAR AFLOAT

► At the height of the 1980s takeover boom, he was known as "Irv the Liquidator" because of his penchant for buying and then breaking up companies. Today, however, investor Irwin Jacobs is fighting to avoid becoming Irv the Liquidated.

In an audit of Jacobs' closely held Minstar, a boatmaker,

with BUSINESS WEEK. Through his lawyer, Polo denies the charges. An extradition hearing is set for July.

THE F-22 FLIES AGAINST THE WIND

► The fiery Apr. 25 crash landing that destroyed the only flying prototype of the Air Force's F-22 fighter jet isn't likely to kill funding for the plane. But it was a setback for F-22 contractor Lockheed and its partners, Boeing and General Dynamics. The crash could delay the F-22 program, drive up its cost, and make Congress more cau-

tious about weapons funding.

The Air Force plans to spend \$90 billion for 648 F-22s. Operational flights of the F-22 are set to start in 2002, but if it turns out that design flaws led to the crash, that schedule could slip. General Dynamics could benefit if the delay makes the Air Force push development of a new multirole fighter plane instead: The leading contender is GD's advanced version of its F-16 fighter.

A MUTANT RUTABAGA IS STILL A RUTABAGA

► Genetic engineering promises a harvest of new foods, from rot-resistant tomatoes to healthier oils. But for years, the Food & Drug Administration couldn't decide how to regulate biotech grub. The central issue: Should gene-tinkered foods be appraised like traditional products, or do they require special scrutiny?

Now, the Administration has readied a proposed policy that says gene-spliced foods don't require any special regulation. That decision should be popular with business but could raise the hackles of environmentalists, who want closer regulation of the new industry.



S H A R P T H I N K I N G

To stay ahead in business,
you've got to think ahead.

You need Sharp Thinking.

Sharp Thinking created the
world's first desktop color fax.
And made Sharp #1 in fax.

It brought you the incredible
PC-6881 full-color notebook
computer that builds in
tomorrow's technology today.

It led to advanced copiers
like the award-winning, high
volume Master Series.

"WHAT YOUR BUSINESS NEEDS TODAY IS SHARP THINKING!"

And our most powerful
Wizard® Electronic Organizer.

That's Sharp Thinking. It's
behind all our products. And
behind the Sharp National
Account Program (SNAP) that
offers large-volume accounts
total service and support.

So shouldn't your business
be thinking Sharp?

For more information call:

1-800-SHARP

SHARP
FROM SHARP MINDS
COME SHARP PRODUCTS™

© 1992 Sharp Electronics Corporation

BANKING SYSTEMS • CALCULATORS • CASH REGISTERS • COLOR SCANNERS • COMPUTERS • COPIERS • FACSIMILE • LASER PRINTERS • TV

BUICK PARK AVENUE:

'The hot rod of corporate chieftains.'

—SmartMoney magazine



It should come as no surprise that the Buick Park Avenue is fast becoming the corporate chieftains' car of choice.

After all, in addition to its luxury, safety and style, the Park Avenue

offers something that every top executive demands: Quality. For more information on the 1992 Park Avenue, please call 1-800-3PARK-AVE. Or see your Buick dealer today and take a test drive.



BUICK

The New Symbol For Quality
In America.

Buick is a registered trademark of GM Corp.
© 1991 GM Corp. All rights reserved.
Park Avenue is a registered trademark of GM Corp.



A FLEETING VICTORY FOR CONSERVATIVE DEMOCRATS?

The good times should be rolling as members of the Democratic Leadership Council gather on Apr. 30 for their annual meeting in New Orleans. Their pragmatic ideas about education, welfare, and economic development are pushing traditional Democratic notions of social engineering and income distribution off the party's platform. And Arkansas Governor Bill Clinton, a DLC founder and former chairman, is about to be anointed the Democratic Presidential nominee. Says the current chairman, Senator John B. Breaux (D-La.): "Bill Clinton's success means a new message for this party."

So why aren't DLC members bubbling with confidence and pride? Perhaps because of their sense that while their policy ideas get plenty of lip service in party rhetoric, many Democratic activists remain unconverted. Worse, Clinton's triumph looks to some like a hollow victory: National polls show him locked in a fight for second place with independent Ross Perot and far behind George Bush. Indeed, some Democratic centrists fear that if their prescriptions go anywhere in the next four years, it will be because Bush has shown a sudden fondness for such DLC notions as a national youth apprenticeship program and a new college-loan program for middle-class parents.

REPUBLICANS IN DISGUISE? The DLC was formed seven years ago by a small group of mainly Southern moderates in the wake of Walter F. Mondale's 1984 Presidential catastrophe. They were convinced the party needed a forum where elected officials could develop a pragmatic philosophy with appeal to business and suburbanites. Continued allegiance to Mondale's labor-backed brand of liberalism, they feared, would keep the Democrats permanently out of the White House and would eventually jeopardize control of the House.

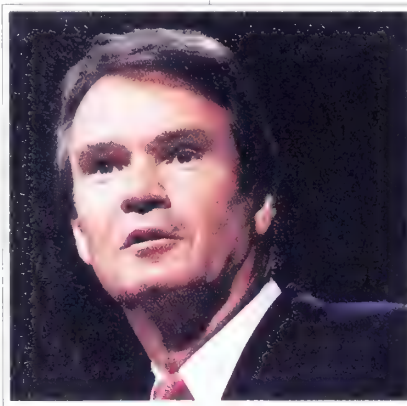
At the core of DLC thinking are ideas radical only in their departure from Democratic orthodoxy: an emphasis on fiscal

restraint and middle-class values, a preference for cautious pilot projects and state experiments, government-business-labor partnerships to enhance competitiveness, and use of market-based incentives to help the poor. The group also cooked up such innovations as Super Tuesday, the Southern regional primary that gave Clinton a vital boost this spring.

But when campaigning in big cities, Clinton edged away from the DLC agenda to enhance his appeal to traditional Democratic constituencies. "Tacking left has had a certain cost," says Democratic activist Michael McCurry. "There is

clearly disgruntlement among the hard core in the DLC about Clinton's circuitous path to the nomination." They worry that Clinton will find it difficult to move back to the center for the fall campaign.

Meanwhile, the Democratic left wing, still potent within the party's councils, hasn't relented in its hostility to the DLC. Jesse Jackson derides it as "Democrats for the leisure class." Jerry Brown says it's "as close to Republicanism as you can get and still be able to use the label Democrat." Liberals aren't surprised that Bush is picking off DLC ideas. And they're outraged by the group's reliance on such giants as Philip Morris, Atlantic Richfield, and TRW for more than two-thirds of its



CLINTON COMPATRIOT BREAUX

\$2.5 million annual budget.

But aside from the bleats of liberals, the best evidence that the DLC has arrived is found in Bush's campaign rhetoric. Struggling to convince voters that he has a domestic vision, the President boasts of his education and health plans. Blasting the political status quo, he declares: "I am the leader that's trying to change it." Such appropriation of DLC ideas leaves the group at the mushy middle of U.S. politics, wondering whatever happened to its goal of creating a new, innovative Democratic Party with broad appeal to middle-class voters.

By Douglas Harbrecht

CAPITAL WRAPUP

PRIMARIES

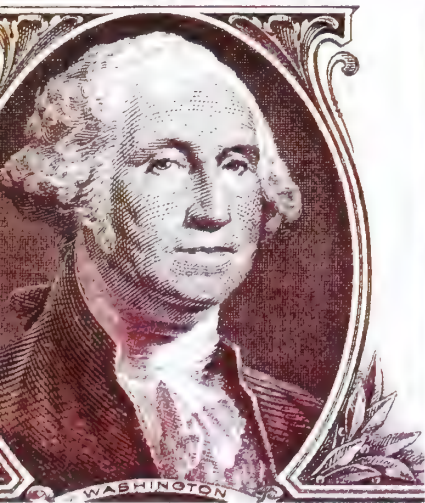
Maybe Representative Patricia Schroeder just picked the wrong year. In 1988, lack of money and support forced the Colorado Democrat to give up her plan to seek the Presidential nomination. But 1992 is turning into the year of the female insurgent. The most stunning evidence was the victory of Democrat Lynn H. Yeakel, who won the nomination to challenge Senator Arlen Specter (R-Pa.) this fall. A fund-raiser for women's causes who had never sought office, Yeakel turned her outrage at Specter's role in the Clarence Thomas confirmation hearings into a crusade that left two expe-

rienced opponents in the dust. "The politics of experience can prevail over the experience of politics," Yeakel declared in her victory speech.

It will be tough for Yeakel to dump Specter, whose pro-choice stand has long won him the support of women's groups. But this could be the year that women, the ultimate political outsiders, profit from voters' surly mood. In Democratic Senate races alone, Yeakel and Chicago's Carol Moseley Braun have won nominations. Former Representative Geraldine A. Ferraro leads in New York. And California could produce two women nominees: former San Francisco Mayor Dianne Feinstein and Representative Barbara Boxer.

FOREIGN AID

President Bush may have to accept some unwanted domestic spending to win House approval of aid for former Soviet republics. House Majority Whip David E. Bonior (D-Mich.) is threatening to hold up action on the Administration's assistance package unless Bush signs off on a plan to pump \$10 billion into a jobs-producing public-works program and a measure to provide a long-term extension of unemployment benefits. The White House wants the foreign assistance package passed before Russian President Boris Yeltsin visits Washington on June 16-17.



Over 80% of the most prominent figures in banking count on our computer solutions.

Throughout the world, bankers who speak dollars and bankers who speak yen and bankers who speak pounds, pesos, Deutsche marks, and francs, all speak to Unisys for answers to their mission-critical needs.

Forty-one of the world's 50 largest banks rely on Unisys information systems. And half the world's checks—40 billion annually—are processed on Unisys computers. But the work hardly stops there.

Over 3,000 financial institutions

depend on our systems for funds transfer. We've put our banking customers a year ahead of the competition in check imaging solutions. We offer unequaled capability in the revenue-generating area of branch automation. And we rank first in customer satisfaction surveys of markets as demanding as Japan.

UNISYS

We make it happen.

So it's hardly surprising that ten of Japan's top ten banks, ten of Europe's top ten, nine of America's top ten, seven of twelve U.S. Federal Reserve banks, and 60,000 other distinguished customers recognize Unisys as a world leader in mission-critical information systems.

A few more prominent figures: 1-800-448-1424, ext. 170. When you call, ask how we can put the advanced technology and dedicated people of Unisys to work on your account.

WHILE TRAINS STOP, GERMANY'S ECONOMY DERAILS

By balking at wage hikes, Kohl admits that the cost of German unification is out of control

It's 7 a.m. at Frankfurt's main railway station and the start of another workday. But in the cavernous *Hauptbahnhof*, the trains aren't running on time. Indeed, they aren't running at all. For the first time in nearly two decades, Germany's rail workers are out on strike, leaving tracks empty and information boards blank.

For commuters accustomed to efficient service and labor peace, the rail walkout is shock enough. But from one end of Germany to the other, nearly 200,000 of the country's 2.8 million public-sector employees have taken to the streets.irate over Chancellor Helmut Kohl's refusal to grant 5.4% wage hikes, the union workers are letting garbage pile up in Munich and are standing by as 35-mile-long traffic jams clog highways around Düsseldorf. "We must step up the pressure," vows Wolfgang Warburg, the public-service union's deputy chief.

In confronting the public-sector

unions, Kohl is for the first time admitting something a growing number of Germans already know: With its cost exceeding \$1.8 trillion, unification is going awry. Says Commerzbank economist Peter Pietsch: "We were wrong to say we could have a new economic miracle and it wouldn't cost much at all."

BROKEN DREAMS? The hoped-for miracle is rapidly becoming a morass. Rising inflation, high interest rates, and an orgy of government borrowing are unraveling Germany's consensus-driven economy and could even prolong a global economic slump. But for a Europe whose economic future is inextricably linked with



KOHL: DRAWING A LINE

Germany's, Kohl's showdown with labor is a watershed. If the Chancellor can't persuade western Germans to shoulder the cost of rebuilding the east, more than unification will flounder. So will Kohl's dream of a united Europe cast in Germany's image.

Already, Germany's major corporations are abandoning hopes of creating an Asian-style tiger on their eastern doorstep. With employers promising eastern workers

wage parity with their \$13-an-hour western counterparts by 1996, manufacturers are fleeing Germany for the real Tigers and elsewhere. Volkswagen, for example, plans to invest more than \$25 billion outside Germany in the 1990s. "We have to produce abroad to give ourselves a future," says CEO Carl H. Hahn. Just as the public workers were beginning their walkout, Mercedes-Benz said it would slash 20,000 jobs by 1994. Officials have already indicated they might shift some production to Mexico.

Of course, Germany was a high-cost nation even before the Berlin Wall fell in 1989. But inflation is now at a 10-year high of 4.8%. With metalworkers threatening to follow public-sector employees off the job, both Kohl and Bundesbank President Helmut Schlesinger fear the Germans—and Europeans—will price themselves out of world competition. In fact, machinery giant ABB Asea Brown Boveri already plans to cut costs by "closing factories this year and next across Europe," warns ABB's German operations chief, Eberhard von Koerber.

Such concerns prompted the Chancellor to take on the public-employee unions, much as the Reagan Administration



ON STRIKE: RAIL WORKERS AND 200,000 OTHER PUBLIC-SECTOR EMPLOYEES HAVE GERMANY TIED UP

confronted striking air-traffic controllers in the 1980s. With national and local governments already \$110 billion in the red, Kohl believes the 5.4% wage hike recommended by an arbitrator last month will cost an additional \$1.2 billion that taxpayers can't afford. Kohl's offer: 4.8%.

The Chancellor's success will set the pace for the rest of his cost-cutting agenda. To reduce government deficits, Kohl wants to slash subsidies to western states, squeeze spending by state and municipal governments, and prune Germany's cradle-to-grave welfare system. That's sure to anger voters. Weary of being asked to pay to rebuild the east, support Russia, and house asylum-seekers from Eastern Europe, voters in April's state elections deserted Kohl's Christian Democrats and the opposition Social Democrats in favor of extreme right-wing parties.

LOST ALLY. Kohl's problems only deepened with the Apr. 27 resignation of longtime Foreign Minister Hans-Dietrich Genscher, the most popular politician in Germany and the Chancellor's main ally in pushing for European integration. Genscher's resignation immediately touched off a power struggle among members of Kohl's ruling coalition. That bodes ill for unity in the runup to the critical elections facing the government in 1994.

Worse, Kohl no longer will be able to count on Genscher to persuade voters that last December's Maastricht Treaty on European union will be in their best interests. "They are only now waking up to what European union really will mean and what it will cost," says Rosalind Stevens-Ströhmman of London's Royal Institute of International Affairs.

With elections looming, Kohl has little time to change voters' minds. Frankfurt bankers figure if he stays his ground, the Chancellor will be able to limit public-sector raises to around 5%. Such a concession could open the door for industrial settlements well under the 6.4% increase won by steelworkers in March. That, in turn, would reduce fears of a wage-price spiral and permit lower interest rates, perhaps by fall.

Through the turmoil, Kohl has remained upbeat. Facing reporters on Apr. 27, he insisted that the German economy will grow 2% this year and 3% in 1993. By yearend, he maintained, inflation will fall to "three point something, which we can live with."

To deliver on those promises, Kohl will have to balance his obligations to hopeful east Germans, resentful west Germans, and anxious Europeans. In his decade as Chancellor, Kohl has never faced such a daunting challenge.

By John Templeman and Bill Javetski in Bonn, with Mark Maremont in London and bureau reports

WHATEVER HAPPENED TO GENTEEL LONDON BANKING?

Hostile bids, forced resignations, and slashed jobs are the new norm



SHAKEUP IN THE CITY

LLOYDS

Smallest but best managed of the Big Four, now plans \$6.5 billion bid for rival Midland

MIDLAND

Needs help. Had agreed to \$5.5 billion takeover by Hongkong & Shanghai, before Lloyds stepped in

BARCLAYS

Chairman Sir John Quinton announces early retirement after profits slide and Olympia & York debacle

NATIONAL WESTMINSTER

Profits fell 78% after big loan write-offs. CEO resigned in March

DATA: BW, IBCA LTD

For a business that has been staid and secure for as long as British banking, the recent scenes have come as quite a jolt. On Apr. 28, Sir John Quinton, the bespectacled chairman of Barclays Bank PLC, stood at a press-conference podium, stubbornly denying that he was being forced into retirement by shareholders and directors fed up with the bank's performance. On the same day, in another part of the City of London, Lloyds Bank PLC announced what would be Britain's biggest bank deal ever: a hostile takeover offer of \$6.5 billion for rival Midland Bank PLC.

A wave that has rocked the rest of the financial world is now washing over the City. Swept away with it is the charmed life of British bankers. More and more, the tradition of paternalism is being dropped for coldhearted ruthlessness. It comes in the wake of four years of ever-mounting bad debts, tougher competition, and skittish shareholders. "The days of playing golf and hanging out are over," says a senior London banker.

As in the U.S., tens of thousands of jobs are being slashed, and heads are rolling from the local branches to the top. In addition to Quinton's unexpected

retirement from Barclays, the chairman of Midland and the CEO of National Westminster Bank PLC have recently resigned under pressure.

In Britain, the new element is the urge to merge, which is gobbling up competitors to fortify domestic bases. "We're in for a fundamental restructuring of the banking system," says Lloyds CEO Brian Pitman. "It's happening all over Europe."

TRUMPED ACE. Executives at Lloyds and other banks contemplating mergers hope to reduce costs and raise margins by eliminating overlapping services and slashing overheads. If Lloyds' offer for Midland goes through, as many as 1,000 of the two banks' 3,745 branches would close and the Midland name would disappear. Some 20,000 employees, out of a combined corporate work force of 110,000 in Britain, would lose their jobs. The payoff: an estimated savings of \$1.2 billion a year by 1996.

Even if the Lloyds deal is blocked by regulators who are fearful that it might penalize small-business clients, banking experts figure there will be no stopping a faster pace of mergers in Europe. The single market, which will allow financial

institutions to peddle their products throughout the European Community, will hasten the trend. Already, Spain's Banco de Bilbao and Banco de Vizcaya have merged, as have Algemene Bank Nederland and Amsterdam-Rotterdam Bank in the Netherlands.

Robin Monro-Davies, managing director of credit analysts IBCA Ltd., foresees a merger wave sweeping the building societies, which are Britain's equivalent of savings and loan associations, and smaller banks on the Continent. "Banks

are no longer protected," he says.

If Lloyds manages to bag its prey, it will trump a \$5.5 billion buyout agreed to two weeks earlier between Midland and the parent of Hongkong & Shanghai Banking Corp. But the two deals could not be more different: Hongkong and Midland have bold ambitions for a global bank with a strong presence in Asia, Europe, and the U.S. It's an admirable vision but one that recent history suggests is difficult to pull off. By contrast, Lloyds, which has become Britain's most

profitable and best-managed bank—after being pummeled by Third World loans a decade ago—would concentrate its resources in Britain.

Lloyds' tack is also the opposite of its chief rivals, Barclays and Natwest. Those two have little to show for their U.S. and European expansions, but they want to keep a strong global reach. Whatever their strategy, banks are going to be operating on a much tighter leash.

By Richard A. Melcher in London

BRAZIL

'I KEEP SAYING WE HAVE TO HURRY, HURRY, HURRY'

President Collor talks about free trade and the opening of Brazil

For 17 years, executives of computer companies trying to sell in Brazil have been thwarted by blatant protectionism. Suddenly, they are seeing things change fast. Spearheaded by President Fernando Collor de Mello, moves are under way to open up the long-restricted computer market. Just last week, a government-industry committee agreed to new cuts in import tariffs for computer gear. And in late October, personal computer makers will see an end to the long ban on imports and local production by foreigners.

For Collor, who has been struggling for two years to reform Brazil's volatile economy, this kind of trade liberalization is urgent. At 42, Collor is Brazil's first democratically elected president in three decades. In his 1990 campaign, the karate black belt vowed to wipe out widespread corruption and modernize the economy.

Collor fears that without quick action, Brazil may be left behind its Latin American neighbors. They are pushing ahead with free-market reforms and cashing in on growing foreign investments.

UNION BACKING. "I keep saying we have to hurry, hurry, hurry," Collor said in an interview with *BUSINESS WEEK* in Brasilia's futuristic Planalto Palace. "Two-and-a-half years ago, if you talked about ending market protection for the computer industry, or opening our border, or privatization, you would have been accused of working against the national interest."

Already, foreign companies seem to be getting the message. Last year saw a massive inflow of funds, totaling \$11.6

billion. Another \$4.4 billion poured in from January to March of this year. Among Brazilian business executives, there is even optimism over Collor's chances to beat a nagging recession. He has already won some battles against Brazil's chronic inflation. It slowed to a 21% monthly rate in March, down from 27% in January. Says Enrico Misasi,



COLLOR HAS LOWERED TRADE BARRIERS—AND INFLATION

president of Olivetti do Brasil: "Our product line has expanded incredibly, and we're projecting 15% to 20% growth in local sales and exports."

Also gathering momentum is Collor's drive to privatize much of Brazil's vast array of state-run companies. Foreigners are expected to bid in the next major auction on May 15, when a petrochemi-

cal plant goes on the block for a minimum of \$784 million. Key labor unions are now supporting the sell-offs, realizing that it's the only way to save their jobs. Otherwise, "the companies will lose market share, they will lay people off, and they will go bankrupt," Collor says.

Collor is even prepared to tackle Brazil's politically sensitive state-owned oil and telephone companies, Petrobrás and Telebrás. "The issue is monopolies, not privatization," says Collor. That means that, for the first time, private companies will be allowed to compete against them. To do so, Collor is asking the Brazilian Congress to end a constitutional ban keeping private companies out of these sectors, considered to be key to national security.

PINK-SLIP POWER. To spur Brazil's economy and permanently curb inflation, Collor is preparing an assault on the bloated government. He'll soon ask for authority to revamp the tax system and slash the deficit. He also wants power to lay off thousands of bureaucrats who enjoy lifetime job security. He faces heavy going in Congress but expects at least the tax reform to be approved by yearend.

Collor's plans are getting a boost from the regional move toward free trade in Mercosur, the economic bloc that Brazil has formed with Argentina, Uruguay, and Paraguay. An even broader impetus could come from President Bush's Enterprise Initiative for the Americas. It aims to link the rest of the hemisphere to the proposed North American Free Trade Agreement and eventually create a hemispheric trade bloc.

Collor endorses that goal: "What we would like to see after Brazil becomes stable and forms a partnership with its neighbors is further integration through Bush's initiative." Already, Collor's reforms may make Brazil the engine of recovery for a large chunk of Latin America.

By Geri Smith and Elizabeth Weiner in Brasilia, with John Pearson in New York

PRINTERS THAT WORK WHEREVER YOU WORK!

Now there's a Kodak Diconix printer for you,
wherever and whenever you work. Who gives you a choice
of mobile and portable printers? Kodak!



Some people want a quality
desktop printer that's small
and light enough to carry
between home and office.

Some people want a portable printer that's compact and rugged
enough to print anywhere, anytime. Now Kodak offers both!

A compact pro, the mobile desktop printer.

The new Kodak Diconix 701 printer delivers professional-quality
text and graphics on your desktop, at the office, at home—or



New Kodak
Diconix 701 printer.
The compact pro.

in-between, with the optional

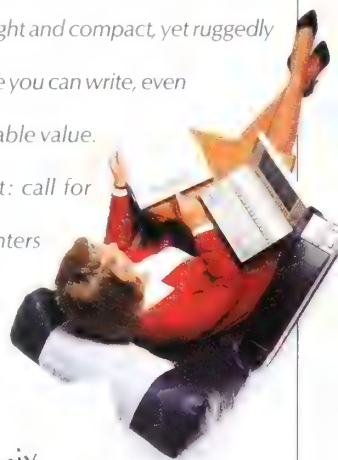
battery. Yet the footprint is smaller than a sheet of paper,
even with the built-in 30-sheet feeder.

The one for the road: a remarkably rugged portable.

But if you often print on the go, see the Kodak Diconix 180si printer.
This is a true portable, incredibly light and compact, yet ruggedly
reliable. Now you can print anywhere you can write, even
at 40,000 feet! And it offers unbeatable value.

Wherever you work, don't wait: call for
the name of a dealer of Kodak printers
near you in the U.S. and Canada.

1 800 344-0006, Ext. 413.



Kodak Diconix
180si printer.
The rugged portable.

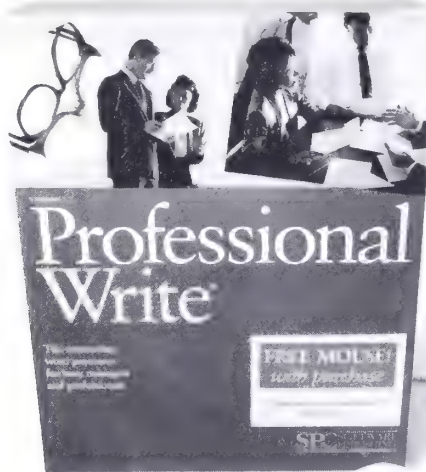
KODAK

Kodak Diconix printers



The word processor is hassle free.

The mouse is just plain free.



Call it the easiest word processor going. Or call it the best deal going. Up to you. Because when you buy Professional Write™ for DOS or Professional Write™ PLUS for Windows from now

until June 30, you'll also get a mouse* (\$69.95 value). Free. Plus mouse support that makes our software even easier to use. At Software Publishing Corporation, we figure

that's what you really need. 'Cause you've got enough hassles already.

SPC SOFTWARE PUBLISHING CORPORATION



Not to hassle you, but get to your dealer soon. Free mouse offer ends June 30, 1992.

*Professional Write™ for DOS and Professional Write™ PLUS are trademarks of Software Publishing Corporation. IMSI Mouse is a trademark of IMSI. © 1992 Software Publishing Corporation. 11000 Laker Road, Santa Clara, CA 95051*Microsoft compatible mouse from IMSI. Professional Write for DOS also includes mouse driver disk.

HONG KONG'S DWINDLING HOPES FOR DEMOCRACY

The ornate governor's mansion in Hong Kong with its dozens of servants in livery seems an unlikely place to send rough-and-tumble British politician Christopher F. Patten. But Prime Minister John Major, in appointing the architect of his reelection campaign to the governorship, is sending someone with the clout needed to handle the critical last five years before the colony is handed over to China.

Patten, the ambitious Conservative Party chairman who lost his seat in Parliament, will want his performance in the colony to further his career. But he has a tough balancing act coming up. He must get Beijing, which scorned outgoing Governor Sir David C. Wilson as a mere functionary, to deal directly with him rather than London. And he risks being caught between a powerful business community that does not want to offend its new masters on the mainland and increasingly influential Hong Kong civil libertarians. The latter see Patten as their last hope to reverse British backsliding that has seriously eroded the "high degree of autonomy" promised in the 1984 Joint Declaration between London and Beijing.

Patten's job will be made tougher by the Hong Kong public's sinking regard for the British. Polls show that confidence that the British will protect Hong Kong from the Communists is falling fast. The problem is that it looks as if the 50 years of self-rule promised by the Joint Declaration instead will turn into an authoritarian state run by local loyalists to the Communists. China recently made a big show of naming 44 such "advisers."

Although the American and British business communities are leery, most Chinese businessmen in Hong Kong say they don't object to such an arrangement—because Beijing seems unlikely to tamper with the thriving capitalist system. The dwindling prospects for democracy have not stopped stock

prices, real estate values, and investments from reaching record levels in the past two years. Hong Kong's top tycoons, including billionaires Li Ka-shing and Cheng Yu-tung, have built solid ties with China's power brokers. "The political situation is very stable," says a Hong Kong-Chinese financier. "As long as it stays that way, investment will still come."

ACTIVIST WATCH. But there's no guarantee the Hong Kong public will be so quiescent. One million poured into the streets in June, 1989, to protest the Tiananmen Square bloodbath. If Hong Kong were a democracy, the Prime Minister would probably be United Democrats party leader Martin Lee, a British-educated lawyer, whom Beijing regards as a "subver-

sive." Hints by top cadres that a new Bill of Rights will be repealed and disclosures that China's representatives in Hong Kong are keeping tabs on activists raise fears of a looming clash.

In accepting the governorship on Apr. 24, Patten vowed to put "the interests of Hong Kong" foremost. Indeed, a governor not as fearful as Wilson of Beijing's displeasure could take many measures to make the largely appoint-

ed legislature and other branches of government more democratic. "The Wilson government has been disastrous for the development of democratic institutions," says Lee.

While Patten may get more respect and ink than the colorless Wilson, there is reason to doubt he'll be very different in substance. "He will probably be cautious about making any changes to the pattern that is well-established," says former Northern Ireland Secretary James Prior, now chairman of Britain's General Electric Co. No matter what the British say as they try to exit Hong Kong gracefully, their priority is in keeping good ties to a major trading partner: China.

By Pete Engardio in Hong Kong, with Mark Marcum in London



CONFIDENCE IN BRITISH SAFEGUARDS IS SINKING FAST

GLOBAL WRAPUP

EUROPE

The Europeans are continuing to keep the Japanese off balance on car sales. On Apr. 23, the European Community extracted a promise from Japan to limit exports to Europe to just under 1.2 million cars—a 5.9% drop from 1991. The excuse: projections that new-car sales in Europe will drop 1.3%, to 13.7 million this year. Although Japan had only 11.3% of the EC market last year, it has agreed to absorb almost half of the total European decline. The deal will hurt such smaller makers as Mazda Motor Corp. and Fuji Heavy Industries Ltd., which aren't yet producing from transplants. By going

along with the cuts, the Japanese are trying to protect their transplants, which the EC limits don't affect yet. Their production is expected to rise 5% above 1991's 310,000 units. But Japanese executives worry that the transplants also may come under pressure. Such fears could cause them to restrain production and new investment.

RUSSIA

The humble ruble may be a step closer to joining the ranks of fully convertible currencies. On Apr. 27, Russian First Deputy Prime Minister Yegor T. Gaidar announced plans for a single, market-determined currency-exchange rate by July 1. While Britain's

Chancellor of the Exchequer Norman Lamont has suggested linking the ruble to the ECU, the Russians want to peg their money to the dollar—but with a twist. Although Western officials prefer a fixed rate, the Russians want the value of the ruble to slide 7.5% above or below a target rate to the dollar. Russian officials talk about a 50 ruble-to-the-dollar rate—though that may be unrealistic given today's rate of roughly 140 rubles to the dollar. Still, expect an overhaul of Russia's confusing patchwork of four separate exchange-rate systems by this summer. Such a change would help attract foreign investment and meet a major precondition for Western aid.

AN END RUN AROUND THE HIGH COURT

Advocacy groups are finding state courts potent agents of change

In some schools in Louisiana, Richard Nixon is still President. As recently as last year, science texts were predicting travel to the moon. In nearby Alabama, it's no better. Alice Frizzette Lyles, a mother of four school-age children, says the cash-strapped Choctaw County High School in Butler, Ala., is breaking down. Teachers, including her husband, dig into their own pockets to buy supplies. At the local elementary school, music and art classes don't exist, and books are replaced only every six years. The ceilings leak, the buses break down, and there is no school nurse—an extra burden for Lyles's son Phillip, who has asthma. "We can't expose our children to what others are exposed to," says Lyles. "It's not giving them a fair chance when they go into the marketplace."

Enter the American Civil Liberties Union. The civil rights group is pressing class actions in Alabama and Louisiana on behalf of parents and children, including the Lyles family, challenging the quality of education in the public schools. Supported by some local business leaders, the suits are part of the ACLU's new state-by-state initiative to establish a constitutional right to an "adequate education." The novel cases mark a dramatic shift in strategy for the 70-year-old ACLU. Instead of turning to federal courts to forge new rights under the U.S. Constitution, it uses state constitutions to expand individual liberties.

PATCHWORK. The ACLU is not alone. Faced with a staunchly conservative U.S. Supreme Court, civil rights groups and others are dusting off state constitutions to enforce rights in state courts that would receive a hostile reception at the federal level. "We have embarked on a state constitution strategy," says ACLU Associate Legal Director Helen Hershkoff. "We are not beating a hasty retreat just because we can no longer count on the Supreme Court to protect civil rights."

The strategy, promoted in 1977 by liberal Supreme Court Justice William J. Brennan Jr., is proving a winner. From 1977 to 1986, state courts issued "well over" 200 decisions recognizing state constitutional rights that go beyond the federal Constitution, says the ACLU. State constitutions now provide greater rights than the U.S. Constitution in such areas as education financing and envi-

could ultimately prove disastrous for corporations. "The idea that the federal Constitution would be the floor and that business would have to comply with 50 state laws could wreak havoc," says Alan M. Slobodin, a lawyer at the Washington Legal Foundation, a conservative advocacy group. U.S. Chamber of Commerce General Counsel Stephen A. Bokkat says business executives would much prefer "national uniformity" over state regulation—even if the federal standards prove tougher than those in some states. The desire for uniformity in part is driving the current push for a federal product-liability law.

FULL CIRCLE. Liberals and conservatives have come full circle since the heyday of the civil rights movement. In the 1960s, the activist Warren Court was the liberals' strongest ally, while the rallying cry among Southern conservatives was



ALABAMA'S LYLES WITH DAUGHTERS BESSTINA AND FRIZZETTE: DEMANDING AN "ADEQUATE EDUCATION"

AN EXPANDING ROLE FOR STATE CONSTITUTIONS

Faced with a hostile U.S. Supreme Court, advocacy groups are increasingly using state constitutions to win rights currently unprotected by the federal Constitution. Here's a sampling:

EDUCATION

Courts in 10 states have ruled their state constitutions require equitable funding for rich and poor school districts, an argument the Supreme Court rejected

ABORTION

Even if the Supreme Court rolls back abortion, the Florida and California state constitutions have been interpreted to protect a woman's right to end her pregnancy

ENVIRONMENT

Many state constitutions such as that of Illinois protect the right to a healthy environment. The U.S. Constitution has no such provisions

DATA BW

ronmental protection (table). The trend is "gathering momentum," says Rodney A. Smolla, a professor at the College of William & Mary School of Law. "There's a lot of pressure in state courts to adopt more liberal rulings."

Conservative and business groups are squawking. To be sure, they're pushing state constitutions as a vehicle to promote specific agendas. But they warn that the rise of state constitutions, with their patchwork of rights and duties,

"states' rights." This liberal-conservative, federal-state court split continued through the 1970s, even though Republican nominees dominated the high court.

Ironically, conservatives blame their disillusionment with the states on Ronald Reagan. The former President packed the bench with conservative jurists sharing such a strong commitment to federalism that they have been loath to preempt state laws or second-guess their state-court brethren. At the same



IF YOU
LISTEN HARD
ENOUGH YOU
CAN HEAR
ALMOST
ANYTHING.

With Telecommunications Devices for the Deaf (TDDs), the hearing- and speech-impaired are able to communicate via telephone more easily than

ever before. Yet even with these type-writer-like devices, many disabled persons have found it difficult to break the telephone's sound barrier.

That's why ROLM® offers a special link that captures a TDD's distinctive tones. With our TDDisplay application the benefits of PhoneMail® can now be extended to hearing-impaired employees and customers.

This very practical solution has opened tremendous new channels of communication for the estimated thirty million hearing- and speech-impaired Americans.

Which is not only good for business, it will also help companies comply with the spirit of the Americans With Disabilities Act of 1990 by improving access for the disabled to telecommunications services.

For more information, call ROLM at (800) 624-8999 ext. 235 – Voice access; (203) 849-6833 – TDD access.

ROLM

**We ask better questions.
You get better answers.**

An IBM and Siemens Company

For 200 years it's been o

Disasters have always been a fact of the insurance business.

That's



Shipwreck, Caribbean 1798



Fire, Chicago 1871

have been

dealing with that fact by relying on the CIGNA Property & Casualty

claims and keep their promises, through some



Quake and Fire, San Francisco 1906

of the world's worst disasters



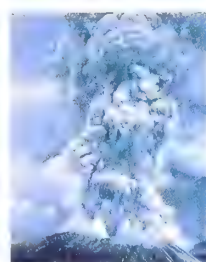
Tornado, Nebraska 194

the burst pipe, the damaged roof. We've handled more of those than we



Fire

with the same integrity that we've brought to



Volcano, Washington 1980

the ones that make the headlines

will strike,



Hurricane Hugo 1989

or how big or small it will be. There's one thing that we



Earthquake

e disaster after another.

hey're a fact of life. For the past 200 years,



Dock Fire, New York 1835

thousands of businesses

es,

whose financial resources and expertise have allowed them to pay their



Flood, Johnstown 1889

ven the smallest disasters seem big to the



Hurricane, New England 1938

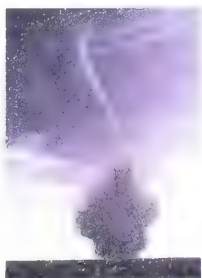
companies they affect. The fire,

could ever illustrate in a thousand advertisements. And always



Earthquake, Los Angeles 1971

s, unfortunately, will always



Tornado, Tulsa 1987

be with us. We don't know where the next one

do know though. We'll be there.

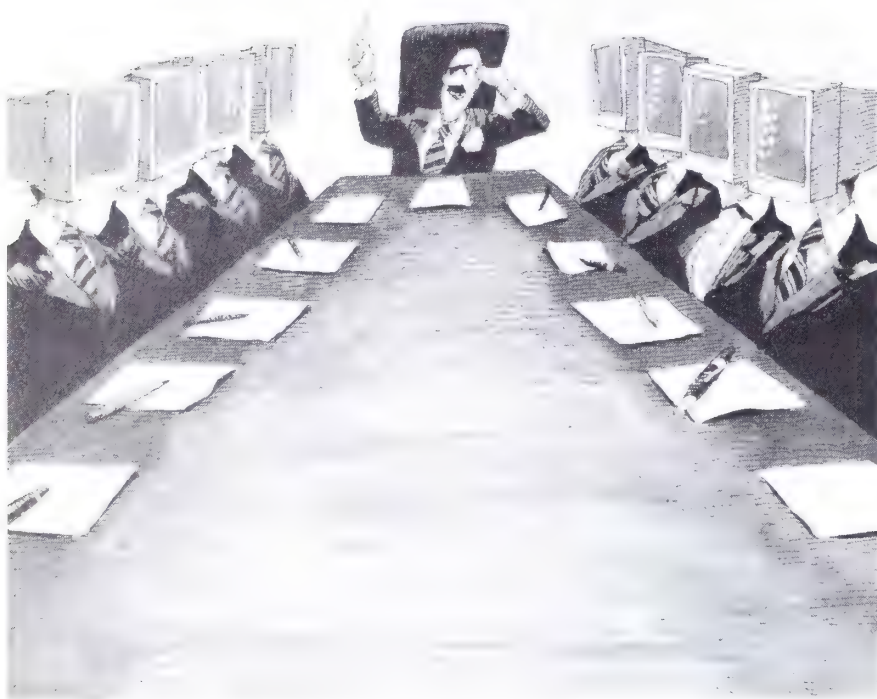
We get paid for results.



PROPERTY & CASUALTY INSURANCE
DEPT. R10, PHILA., PA 19192



AN INVITATION TO PROFESSIONALS WHO'VE DISCOVERED BUSINESS SOFTWARE CAN'T REPLACE BUSINESS SENSE.



If you're one of the many individuals who've realized that your investment in technology alone hasn't provided the solution to your business problems, this briefing is for you.

CIO Magazine, Andersen Consulting and Walker Interactive Systems are hosting morning symposiums to discuss planning for enterprise-wide business and accounting systems into the future. In a few short hours you will understand the factors influencing this business model of the future, and be better able to equate the requirements of your organization to the type of business applications needed to best respond.

While other seminars simply talk about technology, we will show you how to apply it. You will learn how business applications can yield greater value for your organization today, while providing an ever-increasing return on your software investment for years to come.

Space is limited. CPE credit is available. To make a reservation call 1-800-551-7638.



Walker Interactive Systems



ANDERSEN
CONSULTING
ARTHUR ANDERSEN & CO. INC.

ENTERPRISE-WIDE BUSINESS SOLUTIONS SEMINAR
Understanding the Business and Accounting Model of Tomorrow

Indianapolis, June 1; St. Louis, June 3; Los Angeles, June 4; San Francisco, June 5; Miami, June 9; Raleigh, June 10; New Orleans, June 11; Dallas, June 12; Toronto, June 16; Cleveland, June 17; Indianapolis, June 18; Chicago, June 19; Washington, June 23; Philadelphia, June 24; New York, June 25; Boston, June 26.

Legal Affairs

time, Reagan stuck to his promise of reducing the federal government's role, leaving the states to jump in. The result: more state regulation and increasingly activist state judges. "In retrospect, certainly, there's some folks in the business community who are thinking that they were too clever by half," Slobodin says.

In many ways, state constitutions can be an even more potent weapon than the federal Constitution. Striking in language and rich in history, state constitutions spell out rights that go unmentioned in the U.S. Constitution. For example, the constitutions of Florida, Hawaii, Missouri, New Jersey, New York, and Puerto Rico include the right to organize and bargain collectively.

NEW ZEAL. State high courts are virtually free to interpret their own constitutions any way they please. The U.S. Supreme Court has limited authority to review decisions based on state constitutional language. In a pair of privacy cases decided in April, New York's top court boldly rejected Supreme Court precedent on warrantless searches. The New York court ruled that citizens "are entitled to more protection" from improper police conduct than the U.S. Supreme Court has allowed. Last year, the Indiana state court, ignoring Supreme Court law, upheld a constitutional right to government-supplied housing.

In its education cases, the ACLU seeks to stretch state constitutions to new limits. All 50 state constitutions include a right to education. In 10 states, courts have read the provisions to require equitable distribution of state aid between rich and poor school districts. Now, the ACLU claims in suits across the country that states also have a constitutional duty to provide an adequate education.

The argument has gained the support of some business and community leaders in Alabama and Louisiana. In April, Washington's Corporation for Enterprise Development announced its annual "report card" on economic performance, business vitality, and development capacity in the 50 states. Louisiana earned the unique distinction of rating all F's. Alabama got two D's and a C—and had the lowest percentage of high school graduates in its work force of any state.

Louisiana hasn't taken a public position on the ACLU suit filed on Mar. 2. Alabama does support education but has fought the class action on the ground that declaring a constitutional right to an adequate education might have unwarranted fiscal consequences. That may be a legitimate fear. But until the U.S. Supreme Court is more willing to embrace individual liberties, that responsibility will continue to fall on the state.

By Michele Galen in New York

WHY A MESSAGE FROM ALABAMA OFTEN HAS TROUBLE HOLDING WATER.

At the first concert, I expected the audience to show up in bib overalls.

Mark Walker, Executive Director, Alabama Symphony Orchestra, Birmingham



Many messages about Alabama are shot down before ever reaching the target. Age-old misperceptions about the state get in the way, and dilute any positive news. But those who get past the stereotypes to see the reality of Alabama are richly rewarded.

Mark Walker, who moved here from Seattle with his wife Mila to manage the Alabama

Symphony, was surprised to find that, "Audiences here are no different from the most sophisticated

in the country." Mila, a native of Russia who has lived all over Europe and the U.S., says, "This area is on the cusp of discovery—I tell friends who are retiring that they should come here, not to Florida."

"Friends told You're moving to the cotton fields."

Pauley, Plant Manager, Harrison Division of General Motors, Tuscaloosa



The good-natured ribbing that Herb and Linda Pauley got when they announced their move to Alabama has now changed to envy, as friends and family members admit, after visiting, that they wish they could live here. Visitors are impressed both with the cultural attractions and the natural

beauty of the area. "We can see world-class



performers for a fraction of what we'd pay in New York," says Herb. The Pauleys also like to fish, boat and golf year-round in the Alabama climate. Herb has found the work environment favorable as well, "I was surprised at the caliber of skill available. You can find anyone from tool and die makers to technicians to electricians."

Alabama native Robert Ross gets plenty of teasing about the state from clients who fly in to see the computer hardware made by his company, Xante.

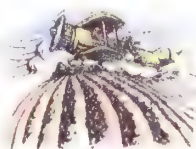
"I think people are surprised to find a high-tech, innovative company here," he says, "But people are very impressed once they come down here, meet people, see the city and enjoy our beaches." Xante's products, upgrade controllers that speed

up laser printers and increase the resolution, are sold worldwide. Ross says he has no trouble finding skilled employees for the company. "There is no lack of training whatsoever; from engineers to technicians, we find that colleges and tech schools here offer excellent training."

So, the next time you hear a positive message about Alabama, don't let any negative misperceptions destroy it. Rather, take a closer look. Because we're convinced that the case for expanding a business to Alabama will hold water.

"Clients ask us if they'll be dropped off in Alabama by a crop duster."

Robert Ross, President Xante Corp., Mobile



ALABAMA

Alabama Isn't Where You Think It Is.

Comparing a used Dodge Spirit to a new Honda Accord seemed a little ridiculous. Until we saw the results.

Put a brand new Spirit up against a new Accord, and you've got a pretty fair contest. After all, Spirit comes in at just \$12,682 – even when it's loaded with an automatic transmission, air conditioning, electronic speed control, a four-speaker stereo, tilt steering column, and more.[†]

Plus, Spirit gives you a standard airbag. And the Owner's Choice Protection Plan, a warranty choice you don't get from Honda or anyone else.^{††}

But put 70,000 miles on a Spirit and

then compare it to a new Accord. You wouldn't think it could possibly compete. But it not only competes...it wins.

The fact is, we recently asked 100 people to make just such a comparison.*



Dodge Spirit



BUY OR LEASE AT YOUR DODGE DEALER. Buckle up for safety. †MSRP includes 22D Pkg. and excludes tax & dest. charge. Paint shown \$97 extra. ††See limited

*100 GM & Ford owners from the Los Angeles area likely to buy an import compared '92 5-passenger models **MSRP comparisons of 1992 Spirit with 22D Pkg. and available

They rated both cars on 33 different counts, covering driving and handling ease, smoothness on the road, comfort and convenience, roominess and appearance.

Overall, 58 of those 100 drivers chose the used Spirit over the new Accord.

Surprising? It was, even to us. But the comparison proved to be anything but ridiculous. Because in Spirit,

Dodge clearly has what it takes to go head-to-head with its most serious competition.

And what's more, Spirit is still the lowest priced six-passenger car in the world.**

*Call 1-800-4-A-DODGE
for a free product brochure.*

Advantage: Dodge

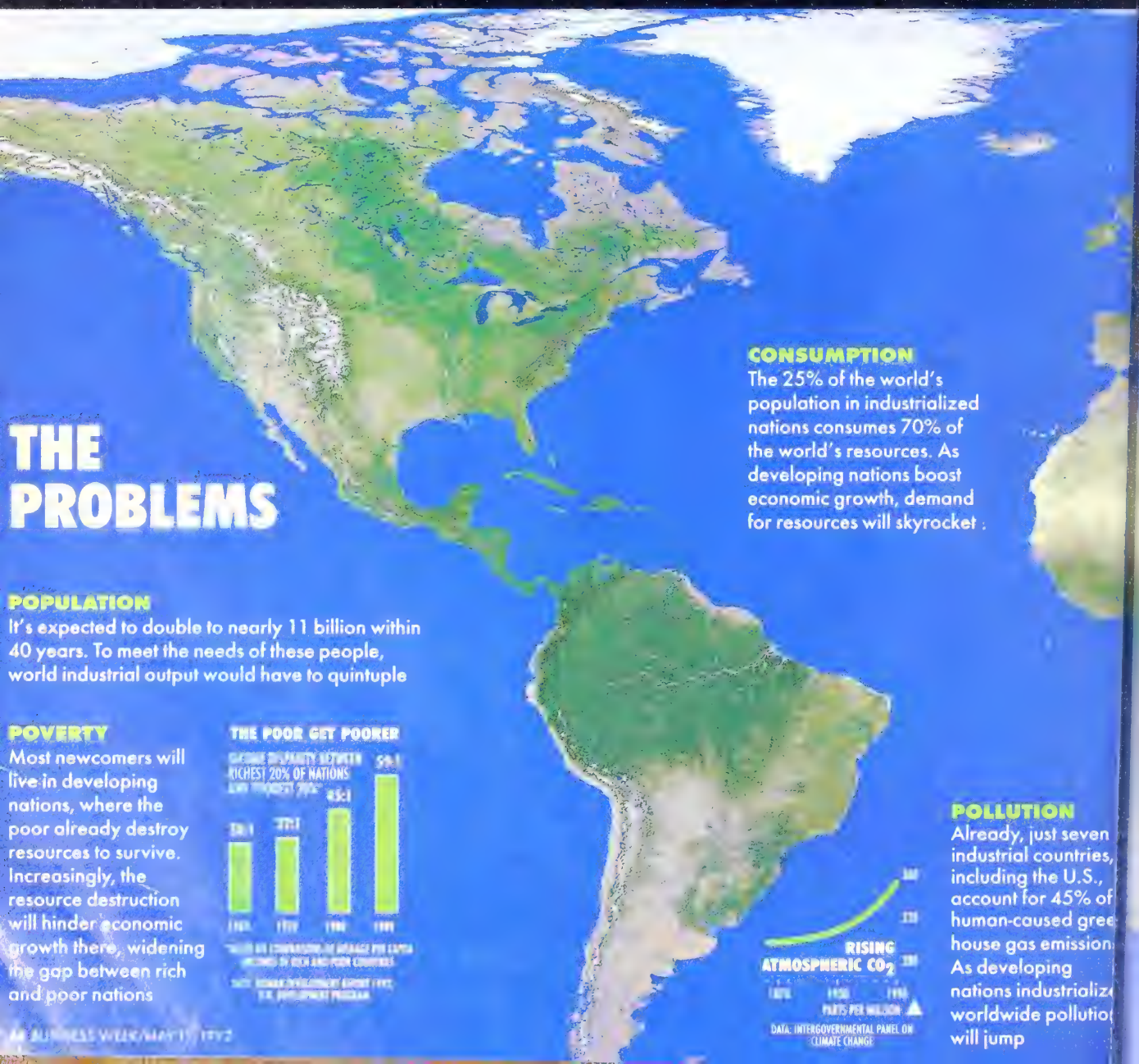


Warranties, restrictions & details at dealer. Excludes normal maintenance, adjustments and wear items. Passenger seating vs. 1992 competitive 6-passenger cars. Equip. levels vary.



GROWTH vs. ENVIRONMENT

IN RIO NEXT MONTH, A PUSH FOR SUSTAINABLE DEVELOPMENT



THE PROBLEMS

POPULATION

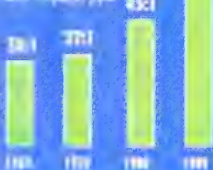
It's expected to double to nearly 11 billion within 40 years. To meet the needs of these people, world industrial output would have to quintuple

POVERTY

Most newcomers will live in developing nations, where the poor already destroy resources to survive. Increasingly, the resource destruction will hinder economic growth there, widening the gap between rich and poor nations

THE POOR GET POORER

GROWING DISPARITY BETWEEN RICHEST 20% OF NATIONS AND POOREST 20%



BASED ON ESTIMATED PER CAPITA INCOME BY RICH AND POOR COUNTRIES

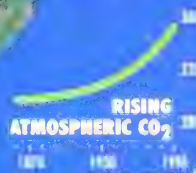
SOURCE: WORLD BANK (1999), U.N. DEVELOPMENT PROGRAM

CONSUMPTION

The 25% of the world's population in industrialized nations consumes 70% of the world's resources. As developing nations boost economic growth, demand for resources will skyrocket

POLLUTION

Already, just seven industrial countries, including the U.S., account for 45% of human-caused greenhouse gas emissions. As developing nations industrialize worldwide pollution will jump



DATA: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

In 1972, Donella and Dennis Meadows set off a furor with their book *Limits to Growth*. They argued that the earth's resources and its ability to absorb pollution and regenerate are finite. Using computer models, they also predicted that population and growth would bump up against these constraints within a century. "Scientists warn of global catastrophe," screamed headlines. Parliaments and scientific societies debated the issue while economists attacked the authors' assumptions, methods, and conclusions. The book sold 9 million copies. But the subject was quickly eclipsed by more pressing concerns and derision of their Malthusian alarms.

Now, the Meadowses are back, with a sequel called *beyond the Limits*. This time, they argue that human activity already has overshot earth's ecological limits, and that unless corrective steps are taken soon, their

original scenario is more certain. "It's a much harder message to hear," says Donella Meadows, now adjunct professor of environmental studies at Dartmouth College.

In 1992, however, such views provoke more worry than ridicule. In only 20 years, global population has leaped 66%, to 5.3 billion, while world economic output has nearly doubled. In vast areas, the decline of nature is disturbingly evident. The Baltic Sea is dying from sewage and other pollution. Every year, 25 billion tons of topsoil are lost. In places such as Mexico City and Eastern Europe, millions breathe toxic air. China soon will have cut all its harvestable forests. The ozone layer is thinning, the globe may be warming, and more devastation lies in store.

Left unchecked, world population will double by 2030, the U. N. predicts. By then, some 84% of earth's citizens



A PROPOSED SOLUTION

BOOST EFFICIENCY

Adopt innovations that slash the resources used and pollution emitted per unit of output. These include clean technology such as electric cars, energy efficiency, recycling, 'closed loop' production, less destructive agriculture, and designing products with less packaging, fewer materials, and longer lives



BUILD A FRAMEWORK FOR CHANGE

Account for environmental costs and benefits in economic transactions and revise GNP calculation. Forge international compacts to protect common resources and address global problems. Enact laws and other incentives to curtail destructive actions. Boost international aid for poverty alleviation, family planning, sound agriculture, resource protection in developing nations. Liberalize trade and promote industry investment in developing nations

will live in developing nations, where just giving them the basics might mean quintupling world output. That is the catch-22. "We must renew economic growth in developing nations to address poverty and population increases," says John Sewell, president of the Overseas Development Council. "But if we do it on the same pattern as industrialized countries, the environment will be irretrievably damaged."

'CUTTING EDGE.' Now, in sanctums of power the world over, this escalating conflict between growth and environment has catapulted a notion called "sustainable development" into the limelight. This emotionally charged idea holds that future prosperity depends on preserving "natural capital"—air, water, and other ecological treasures—and that doing so will require balancing human activity with nature's ability to renew itself. It also recognizes that growth is necessary to eliminate poverty, which leads to the plunder of resources. "Sustainable development is what environmental protection should be about," says William D. Ruckelshaus, chairman of waste-hauler Browning-Ferris Industries Inc.

Although still more a vision than a strategy, the concept is emerging from U.N. agencies and think tanks to become "the cutting edge of social and economic reform," says Thomas N. Gladwin, professor of management and international business at New York University. In the past year, government, business, and academic leaders have scrutinized the idea in 80 meetings in a dozen countries. More than 75 books have examined the subject, and dozens of companies are looking at what it would mean for them (page 74).

This freizy grows out of a two-year buildup for the U.N. Conference on Environment & Development (UNCED), to be held in June. Heads of state and negotiators from 170 countries will converge on Rio de Janeiro to consider a controversial agenda to protect the earth's atmosphere and species, attack poverty, and foster less destructive industrialization. This could be the first step toward what

Lester R. Brown, president of the WorldWatch Institute, calls a "fundamental restructuring of economies," that would require sweeping revisions in regulatory and economic policies, plus a new global compact between rich and poor nations.

The implications make a volatile brew. Industrial nations would have to shift from resource-intensive production systems and lifestyles to ones that consume vastly fewer resources and dramatically cut pollution. Developing nations would have to practice less destructive agriculture, industrialize with unprecedented care, and cut birth rates, with all that implies for improving women's rights. They couldn't do it alone: Rich nations would have to give billions in aid, while their industries shared the latest technology. The total impact "would be comparable to that of the Industrial Revolution," says Hardin Tibbs, a consultant at Global Business Network.

Not everyone agrees a revolution is

necessary. Some scientists argue that environmental problems aren't as serious as the doomsayers insist. Other experts, such as David Pearce, an economist at University College in London, insist that market forces, plus doses of new technology, would be enough to curtail pollution so that if population stabilizes growth can go on. Others disagree—and say that given the ecological limits, the only way to provide for all of earth's people and avoid ecological disaster is to redistribute wealth.

FEARFUL CONSEQUENCES. Either way, the obstacle at Rio and long after, says one U.S. official, is that "almost anyone can find something to hate or fear in the idea." Sustainable development threatens entrenched interests, and so faces high political hurdles. In April, Brazilian President Fernando Collor de Mello fired his Environment Minister, José Lutzenberger, who had angered business interests by opposing logging in the Amazon. In the U.S., critics fear that

AUTO ASPHYXIA. SIX OF THE LEADING INDUSTRIALIZED NATIONS ARE RESPONSIBLE FOR PRODUCING 45% OF GREENHOUSE GASES



STABILIZE POPULATION

Improve standards of living and the status of women and make family planning widely available to help lower birth rates in developing nations



RESTRAIN CONSUMPTION

Foster lifestyles that lower the burden on the environment, especially in industrial nations: Depend more on public transportation, less on gas-guzzling cars; consume more information-based goods and services, husband consumer goods more carefully; encourage 'green consumerism'



SUSTAINABLE DEVELOPMENT

With the cooperation of industrial nations and developing nations alike, worldwide development might proceed without risking constraint from overpopulation, resource depletion, and ecological breakdown

concept will boost regulation and government spending. This concern has prompted some Republican senators to urge the President not to go to Rio (page 71). Other resistance reflects the fact that "[Americans] don't like changes in lifestyle," says a top Administration official. Sustainable development "questions the purpose of society, the relationships between humans and nature, and demands social justice and equity," adds John D. Sterman, associate professor at MIT's Sloan School of Management. "This is why it's so controversial."

The reason it even gets a hearing is that "life as we know it is at stake," argues Maurice Strong, a Canadian businessman and secretary-general of the UNCED meeting. With the end of the cold war, population pressures plus environmental decay may lead to conflict among nations over food, water, land—and resulting migration. In fact, populations in developing nations grew so fast in the

1980s that their per capita income fell. Though food output is rising in the developing world, food per person isn't. In the past 45 years, a variety of forces has degraded 11% of the world's land, an area larger than India and China, says the U.N. Environment Program. The status quo hurts rich countries, too. Pearce estimates that resource degradation plus the health effects of pollution cost them 1% to 5% of their GNPs.

'A BREAKTHROUGH.' These are radically different concerns than the worries over health that initially drove environmental protection in affluent nations. The idea that prosperity is at stake began to take hold in 1987 with the release of the book *Our Common Future* by the U.N.-appointed World Commission on Environment & Development. It found that environmental rules in industrial nations had a small effect on inflation, a neutral impact on trade, spurred innovation—and didn't necessarily impede growth. It also called poverty as destructive of nature

as industrialization. The conclusions "were a breakthrough," says James W. McNeill, a member of the commission. Out of them came the Rio summit.

Since then, bridging the gulf between rich and poor nations has become the gospel of sustainable development. "In the destitution" of developing countries "and the overconsumption of industrial countries lie the seeds of all environmental problems," says Sir Shridath Ramphal, president of the World Conservation Union. The richest 20% of the world's people have 150 times the income of the poorest 20%. And industrial nations, with 25% of global population, consume 70% of all resources and spew out the most pollution. Just seven, including the U.S. and Japan, produce 45% of greenhouse gases, says the Intergovernmental Panel on Climate Change.

At the same time, limited access to global markets costs developing nations \$500 billion in revenue annually, says the U.N. Development Program (UNDP). As growth struggles to catch up with population in these countries, more people push onto fragile lands. In tropical regions, some 380 million people, a number expected to double within 50 years, live by clearing land for farming that will be worn out in just a few years. Millions more flood already polluted cities.

Crushing debt exacerbates matters. As of 1989, developing nations owed \$1.2 trillion, 44% of their collective GNP. To pay off these borrowings, they have exported about \$50 billion in resources annually since 1983. This sell-off promises to be increasingly devastating, since farming, fishing, forestry, and mining account for more than two-thirds of employment and 50% of export earnings of these nations. Of 33 countries that exported tropical timber in 1985, some 23 are likely to run out within a decade. Yet in that time frame, developing countries will need to create 1 billion new jobs. If they industrialize without clean technology, as China, Brazil, and India are doing, they'll greatly boost global pollution and resource destruction.

Given these trends, "technology be-

CRUISING THE AMAZON POPULATION PRESSURES ARE DRIVING THE POOR TO CLEAR RAIN FORESTS FOR FARMING



comes the chief engine of sustainability," says Robert W. Fri, president of Resources for the Future, in Washington, D.C. Indeed, "eco-efficiencies"—slashing the resources used and pollution emitted per unit of output—is the way for industrial countries to curtail environmental damage. Advanced technologies could slash hazardous industrial waste in the U.S. by 75%, says the U.S. Office of Technology Assessment (OTA). With the proper infrastructure, industrial countries could recycle more than 50% of their paper, glass, plastics, and metals, according to studies by U.N. agencies.

New technologies also could head off the 75% increase in global energy de-

Biotechnology promises to create non-polluting pesticides, crops that need less water, and pollution-fighting microbes. Less wasteful, less energy-intensive biological processes could increasingly replace chemical-based systems. Already, bacteria are used to produce 30% of U.S. copper. They release the metal from minerals—and avoid the sulphur dioxide emissions of smelting.

Even ecosystems could be harnessed for industrial chores. Instead of spending \$30 million on a chemical-treatment plant for wastewater and sewage, the city of Arcata, on Humboldt Bay in Northern California, has laid out \$5 million to create 95 acres of marshes. Their plants and organisms absorb heavy met-

structive agriculture had denuded its steep hills, causing erosion that polluted nearby rivers and lowered harvests. In 1988, the Guinean Agriculture Dept. and the UNDP enlisted 100,000 people in 20 villages to plant trees to conserve and enrich the soil and sow a hardy, high-yield corn. They drilled new wells and gave villagers efficient stoves. Today crop yields are up 50%, villagers trim trees for fuel rather than felling them, and erosion is declining. So is infant mortality.

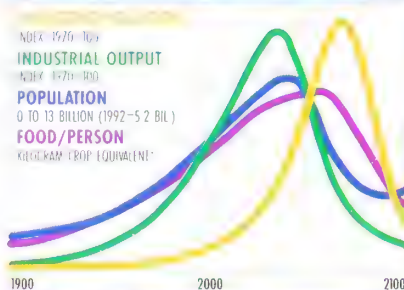
The bigger challenge is conserving tropical forests, which house 50% of the world's species and soak up the greenhouse gas carbon dioxide (CO₂). They are being destroyed at the rate of 42.5 mil-

REKINDLING THE CONTROVERSY OVER THE LIMITS TO GROWTH

Donella and Dennis Meadows touched off a furor in 1972 with *Limits to Growth*, a study that warned of widespread hunger and economic dislocations as a result of population growth and resource depletion. The college professors have updated their analysis to show (1) what might happen if historical trends continue and (2) if policies shift toward controlling population growth and stemming resource depletion and environmental degradation. The new analysis is already controversial, and many economists dispute its methods, assumptions, and conclusions

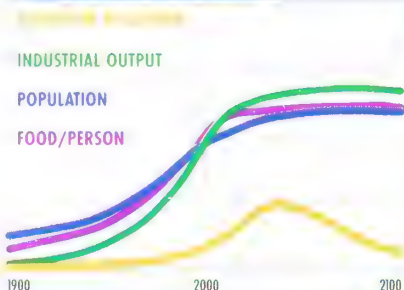
Note: The graphs are extracted from a computer model that calculates the interactions among 225 variables every six months. Each key variable is plotted on its own scale. Pollution, for example, tracks the accumulation of persistent toxic materials relative to 1970

DO NOTHING



Economic and population growth follow their historical patterns. World population rises to more than 9 billion in 2040, and pollution increases. Huge investments are needed to boost agricultural production and to compensate for the depletion of nonrenewable resources such as fossil fuels. Economic growth finally stalls under the weight of those investments, food production falls, the world death rate rises

SUSTAINABLE DEVELOPMENT



Family planning produces an average family size of two children per couple starting in 1995. World population eventually stabilizes at under 8 billion. Without the need to plow capital into food production and pollution control, money goes to pollution-prevention technologies. Within a century the nonrenewable resources used per unit of industrial output plunge by 80%, and pollution falls by 90%. The world sustains, at least until the year 2100, an annual per capita consumer goods output comparable to that of Western Europe in 1990

* FACTORS IN THE DIFFERING AMOUNTS OF LAND REQUIRED TO PROVIDE A GRAIN-OR MEAT-BASED DIET
DATA: DONELLA H. MEADOWS AND DENNIS L. MEADOWS, FROM *BEYOND THE LIMITS*, CHELSEA GREEN PUBLISHING, 1992

mand the Worldwide Energy Conference projects by 2020. The newest air conditioners, furnaces, refrigerators, and lighting fixtures are from 50% to several times more efficient than their predecessors. At current rates of economic growth, installing cost-effective equipment alone could cut electricity demand in industrial countries 20% by 2000, says the International Energy Agency in Paris. And solar power could eventually provide 30% of the energy used in most countries, according to estimates.

BACTERIAL POWER. The possibilities go far beyond that. In the U.S. and parts of Europe, conservation, new tilling practices, crop rotation, and more efficient irrigation are stemming erosion, water waste, and agricultural pollution.

als and pollutants in the wastewater. The wetland is a bird sanctuary now, and fish in the bay are edible.

Along with better technology, less developed nations need a new model for growth, says Brazil's Lutzenberger. In the past, this has been geared toward dam and road projects, ranches and commodity agriculture, and mining—all of which destroy ecosystems and do little to help the poor. The emphasis needs to shift, he says, to creating small businesses and sustainable farming, forestry, and wildlife management.

The techniques and knowhow also exist to make farming less destructive. There's a good example in Guinea, West Africa, on a high plateau called Fauta Djallon. Five years ago, decades of de-

lution acres a year, up 50% since the late 1970s. As a result, some biologists estimate, up to 20% of the world's species will disappear within 50 years, with undetermined effects on the environment. Already, atmospheric CO₂ has risen 20% in a century. The irony is that forests are often worth more standing than cut. In Brazil, converting them to pasture produces about 220 pounds of meat per acre a year. Standing, the forest can produce 2,750 pounds of food. And the value of fruits, nuts, and other products harvested each year can reach twice the one-time logging revenue.

To reap that value, says Robert Goodlund, an economist with the World Bank, developing countries need to "integrate local economies with an interest-

THE ROAD TO RIO: PLENTY OF GOOD INTENTIONS, BUT...

With two months to go before the June 3 start of the U.N. Conference on Environment & Development (UNCED), Maurice Strong, secretary-general of the Rio de Janeiro summit, already looked exhausted. The two-year preparatory process, including a final, five-week spring meeting in New York, had been highly contentious. Delegates from 170 countries had finally O.K.'d an agenda for what Strong calls the most comprehensive international program ever proposed on environmental protection. Yet "many critical issues remain," he says. "We will need a great deal more political will [at Rio] to resolve them."

It's easy to see why. A proposed Declaration on Environment & Development, for example, would commit governments around the world to principles they have never before accepted. The draft approved in New York makes eradicating poverty a global goal and adopts the notion that those who pollute—rich nations, mostly—should pay for the cleanup, then help poor countries improve their standards of living in environmentally sound ways. Developing nations would pledge to curb birth rates. And the declaration would commit everyone to fight environmental threats even before they're scientifically proven to be dangerous.

'WEASEL WORDS.' Beyond that, the same plan gets specific. Agenda 21, an 800-page-plus document, envisions some 120 initiatives between now and 2000. These include steps to cut energy use, protect ocean resources, promote sustainable agricultural practices, and control toxic wastes. Strong, who directed the first global environmental summit in 1972, says some proposals were weakened in the current draft, which has more "weasel words than I'd like to see." For instance, an effort to get multinationals to meet worldwide environmental standards, among other requirements, fell apart. But there will be plenty else to argue over at the 10-day Rio meeting.

The centerpiece is supposed to be the signing of a treaty on climate change. So far, the U.S. has refused to agree to targets for cutting back emissions of carbon dioxide (CO₂), a greenhouse gas. Developing nations won't agree, either, without assurances of aid that will help them buy energy-efficient technology. But by the end of April, a compromise was taking shape, sources say. Industrial nations would stabilize CO₂ emissions at current levels by the

year 2000. That wouldn't be too difficult for the U.S., since a new study from the Energy Dept. and the Environmental Protection Agency indicates that programs already on the table, such as the National Energy Strategy, would take America to within 4% of that goal. Still, Administration sources insist that the U.S. will agree to stabilization only if the goal is non-binding and includes other greenhouse gases on which the U.S. is already cutting back.

Less visible, and closer to consensus, is a proposed convention on keeping plant, animal, insect, and other species from disappearing. The key question is: Who owns the rights to these? More

wealthy nations to pledge \$3 billion to \$6 billion a year, a fraction of the \$125 billion the U.N. has suggested.

An equally pressing question is how to administer and monitor the agenda. The U.S. and other industrial nations oppose creating new institutions with requisite bureaucracies. They would prefer that an existing unit of the U.N. be reorganized to take on the monitoring, although just what powers it would have remains to be seen: The U.S., for one, opposes mandated progress reports. Most industrial countries also favor disbursing aid through the Global Environmental Facility at the World Bank, which already funnels money to the developing world. These potential recipients, however, want a separate entity that gives them more say on which projects get funding.

BLASTING BUSH. The failure to resolve such disputes before Rio has incensed other interested parties, including environmentalists and women's groups. "The governments are not living up to their promises about UNCED," says Barbara Bramble of the National Wildlife Federation. Indeed, environmentalists and politicians in other nations have blasted the Bush Administration, accusing it of endangering the conference. Officially, the President hasn't decided to join 60 other heads of state at UNCED. But some Administration officials predict that he will.

The criticism may be a bit exaggerated. One high-level U.N. official says other industrial nations that also oppose large funding commitments, plus developing nations that don't want limits on CO₂, are "hiding behind the U.S." Still, Bush has also made a shrewd judgment. "We've never had a strong constituency in the U.S. for foreign assistance," says a top Administration official. He's betting that it won't materialize now.

UNCED supporters hope this official is wrong—and that the glare of publicity plus political one-upmanship will shame the U.S. and other major countries into pledging the aid, creating the institutions, and negotiating the compromises required to forge a global partnership for sustainable development. In any event, they say, the UNCED discussions are bound to have an effect. "Rio will be the turning point," predicts Strong, "where we will realize that the future is at risk."

By Emily T. Smith in New York and John Carey and Peter Hong in Washington

THE AGENDA FOR RIO'S SUMMIT

THE RIO DECLARATION Principles for sustainable development—from eradicating poverty to making polluters pay for excesses

AGENDA 21 An 800-page action plan for sustainable development

CLIMATE CHANGE A treaty to head off global warming

FOREST PRINCIPLES Guidelines for managing forests

BIODIVERSITY An agreement to protect the world's species of plants and animals

MANAGING SUSTAINABLE DEVELOPMENT Commit funds from rich nations to poor. Set up ways to monitor agreements. Agree on terms to transfer environmentally sound technology to developing nations

DATA: UNITED NATIONS, BW

than 50% of them live in tropical forests. But only industrial countries have the knowhow to harness their genes through biotechnology and create new drugs, chemicals, and food. Typically, companies have used such species without compensating developing nations. A possible solution lies in proposals that would grant forest access for scientific research—but require companies to share profits through joint ventures, royalties, and the like.

Any deals at Rio will be mostly talk unless billions in aid are earmarked to help poor countries comply. So far, industrial nations have made no commitments of funds to implement Agenda 21. Some UNCED officials expect

maintaining the forests." Colombia and Brazil have ceded control of some forest land to Indians because, he says, "jungle dwellers know how to use the forest sustainably." Costa Rica, meanwhile, has launched INBIO, a nonprofit group that collects forest samples to see if they have commercial value. Last year, drugmaker Merck & Co. paid \$1 million to look at INBIO's store, and will pay royalties if it develops a product.

Making such changes on a large scale is another matter, however. "Sharing well-being between present and future people is something markets, governments, and societies don't do well," says Nobel laureate Robert M. Solow, an economist at Massachusetts Institute of Technology. Indeed, NYU's Gladwin has tallied some 60 social, political, regulatory, and fiscal changes that would be needed for sustainable development. "This would have to be driven by a coherent set of local, regional, national, and international policies, and the best foresight science can provide," adds Ruckelshaus.

A key would be treaties and agreements, such as those on the table at Rio, to protect common resources and ecosystems. One example is the 1987 Montreal Protocol, a global treaty with timetables to phase out chlorofluorocarbons (CFCs), the chemicals that destroy the ozone layer. It was in no one's interest to ban the chemicals—nor would it have made much difference—unless most nations did it. To make that happen, industrialized countries set up a fund to help poorer ones switch to costlier substitutes.

MISSING FACTORS. Far-reaching changes in national regulatory and economic policies also are part of the prescription. Every nation has a web of subsidies, government policies, and taxes that undervalue natural resources, encourage pollution and waste, and deter environmentally sound behavior. To boot, the economic benefits of ecosystems—a forest that protects soil from erosion, for instance—and the costs to society of pollution aren't reflected in the prices of goods and services. Few of the tools economists or investors use consider such factors, either. And resources don't count as assets—or debits, if they're destroyed—in calculating national wealth.

Increasingly, policymakers and economists think the best answer lies in changing the economic ground rules. Phasing out pernicious subsidies is one key. So is revising the calculation of GNP. Norway and France already keep separate accounts for some resources. Similarly, the U.N. Statistical Commission is looking at revising the System of National Accounts, the basis for GNP.

A more fundamental change would be

a system of market incentives to pollute less—a tax on fertilizer, for instance. OECD countries have some 50 such taxes. And recently, EC countries agreed in principle to a tax on the carbon content of fossil fuels. Eventually, says economist Robert L. Stavins at the Kennedy School of Government at Harvard, these could replace existing tax systems.

Economic and policy changes alone won't turn the tide in developing nations, though. Just as crucial, says the U.N., would be massive aid and debt relief from industrial countries, plus investment by multinational companies. Agenda 21, the action plan to be considered at Rio, would cost \$125 billion or more a year until the turn of the century—vs. the \$54 billion rich nations give in aid now. Much of that could be raised if rich countries doubled their contribu-

earth's production on land, according to biologist Peter Vitousek of Stanford University. That leaves 60% and dropping for land-based plant and animal species and ecosystems, which need enough to support their own functions and to purify air and water and regulate climate. This might not be alarming if pollution-control equipment or other lavish technologies could create clean air or control the atmosphere and climate.

'NO NET LOSS.' They can't, Daly argues, so it's better to make sure development doesn't exceed the rate at which nature regenerates. At some point, that means setting limits to the "the scale of human presence and the use of resources, according to some optimal scale," he adds, then letting markets allocate resources within them. In theory, that would be the point where the marginal costs of



tions to 0.7% of their GNPs—by diverting less than 3% of defense spending.

Proponents say, too, that aid should be redirected. Instead of dams and roads, they add, it should largely fund soil conservation, reforestation, family planning, improved agriculture, technology transfer, and poverty reduction. Debt-for-nature swaps, where debt is forgiven if the borrower invests in conservation, could become major incentives. So far, only \$100 million in such deals have been arranged worldwide.

Whether even these changes would lead to sustainable development isn't clear. The limits-to-growth argument is that it won't. "The real issue is the scale of the overall economy relative to ecosystems," says Herman E. Daly, senior economist at the environment department at the World Bank. Directly or indirectly, humans now consume 40% of

growth just equal the marginal benefit after all environmental costs and benefits are tallied. Society has already scaled the scale with CFCs, by deciding the benefits don't outweigh such costs as skin cancer and crop damage that occur as ozone disappears. The same type of trade-off is being discussed in negotiations to cap CO₂ emissions.

For the most part, however, the optimal levels for pollution or resource use aren't clear. Until that's known, Daly and others propose a few simple rules. One is "no net loss" of natural capital. That would preclude projects that destroy forests, drain wetlands, dam rivers, or pave over croplands unless compensating resource is replenished. Another is to err on the side of caution. Since irreversible damage to ecosystems may not be evident until it's too late, "you have to anticipate problems, s-

sume the worst, and start making adjustments," says Robert Costanza, president of the International Society for Ecological Economics.

Daly contends that eventually, societies will have to "develop" instead of grow, like a library that keeps the same number of volumes but improves by replacing worn-out books. Such an economy would improve the quality of life—educational levels, the stock of buildings, human health—without constantly increasing the flow of materials, resources, and energy through the world economy.

The Meadowses have a view of what this would mean. Their latest scenarios show that with hefty investments in technology, the resources used and pollution emitted per unit of output could fall 80% and 90%, respectively, within a century, and the earth could support 8 billion people without irreversible damage. The catch? World output of consumer goods per capita would stabilize at a level comparable to that of Western Europe in 1990—and below that of the U.S. ENCED's Strong describes it as a lifestyle of "sophisticated modesty," more dependent on public transportation, smaller houses, fewer gadgets, and less conspicuous consumption.

Mainstream economists still dispute these ideas—but some don't totally reject the underlying arguments. MIT's Slow, a stern critic of the limits-to-growth idea, concedes that right now environmental issues and waste disposal rank high as potential limits to long-run growth. But until more is known about the carrying capacity of ecosystems and the extent to which technology can substitute for resources, "you can't equate sustainable development with no growth," he says.

If sustainable development ever does take off, it could offer huge opportunities—and pose big challenges—for industry. Demand for environmentally sound technology could unleash innovation, open new markets, create jobs, and give companies opportunities not only to conserve resources but to lower costs and boost profits in the process. The Business Council for Sustainable Development, a U.N. affiliate chaired by Swiss entrepreneur Stephan Schmidheiny, will deliver a report at Rio that endorses sustainable development.

HUNDRED-YEAR PLAN. Japan and some European nations see that potential. They have made commitments to limit emissions, in part because "they are using environmental policy to force their industries to invent new technologies," says McNeil. In 1990, Tokyo unveiled a 100-year game plan for sustainable development and launched the Research Institute of Innovative Technology for the Earth, backed this year by a \$37.5

FIDELITY ASSET MANAGER™

Diversification Made Simple

All It Takes Is One Investment

Fidelity Asset Manager.

Now there's *an easier way* to diversify across a broad range of securities...in one simple investment.

Fidelity Asset Manager seeks high total return with reduced risk over the long term by allocating its assets among stocks, bonds, and money market instruments. The Fund's investments are carefully watched *and gradually adjusted* by Fidelity professionals who seek to enhance your return in *any* market environment. Share price and return will vary so you may have a gain or loss when you sell your shares.

Average Annual
Total Returns* as
of Dec. 31, 1991

23.64%

1 Year

14.58%

Life of Fund
12/28/88-12/31/91

No Sales
Charge!

Call Today. For a free fact kit containing a current prospectus for Fidelity Asset Manager, with more complete information, including management fees and expenses, please call or write. Read it carefully before you invest or send money. **Start with just \$2,500, or \$500 for IRAs and Keogh accounts.**

Visit a Fidelity Investor Center or call 24 hours

1-800-544-8888

Fidelity  **Investments®**
Common sense. Uncommon results.

*Total returns are historical and include change in share price and reinvestment of dividends and capital gains. Fidelity Distributors Corporation, P.O. Box 660603, Dallas, TX 75266-0603.
CODE: BW/FAA/051192

million budget. "In the future, access to international markets will depend on who has the most environmentally sound technologies," says Tsukasa Sakai, senior managing director of JGC Corp. "If U.S. companies don't move aggressively, we will see the same conflict in environmental technology that we see today between GM and Honda."

Japan already has one edge, in fact. Its gains in efficiency during the '70s and '80s were so great that it now uses just 50% of the resources—materials and energy—that the U.S. does to produce one unit of GNP. On many products, says consultant John Elkington, director of Sustainability Ltd., a London-based con-

sulting firm, that translates into a 5% cost advantage on many products.

What everyone is shy of bringing up, however, especially the delegates to UNCED, is how sustainable development might change the dynamics of world growth. One study by Royal Dutch/Shell Group indicates that ending government subsidies for everything from agriculture to oil drilling would free up capital for other investments. And developing countries could save \$1.4 trillion over the next 20 years by using energy more efficiently, according to the Council for Energy Efficiency in Washington. Still, one-third of the activities that contribute to about 75% of current world

growth—including logging, mining, and energy use—are polluting. If these were no longer ascendant, industrial economies would feel some pain.

One study by the Electric Power Research Institute forecasts that the U.S. economy in 2020 would be 2.2% smaller, a reduction of \$230 billion in 1990 dollars, if the U.S. cut CO₂ emissions by 20% from 1988 levels. Under those circumstances, tax relief and other compensation schemes would become essential to overcome the political opposition of the groups, industries, or regions that might be most affected.

Trade poses other kinds of conflicts. Free trade is essential so that develop-

THE NEXT TRICK FOR BUSINESS: TAKING A CUE FROM NATURE



ENZYMES
HELP FERTILIZE
DAMEN FIELDS

Three years ago, top managers at Royal Dutch/Shell Group came up with two scenarios on which to base their long-term planning. In one, reflecting existing trends, regional conflicts plague the world, environmental problems are attacked piecemeal, and low prices shape energy use. In the other, sustainable development takes hold. International cooperation blossoms to combat environmental damage and global warming. Governments discourage fossil-fuel use and promote renewable energy. Both futures are equally probable, says Peter Hatfield, Shell's coordinator of group planning, who tries to prepare managers in 100 countries for any eventuality. "We want to make sure," he adds, "that the decisions our businesses make can exist in both worlds to the greatest degree possible."

Shell is one of a growing minority of companies that are forming task forces, mounting experiments, or revising their planning based on the idea of balancing growth and the environment. "The most innovative thinking on sustainable development is evolving in the business com-

munity," declares John Elkington, director of Sustainability Ltd., a London consulting firm. The leaders are tiptoeing toward a new "approach to management that drives a different set of design and cost considerations," says Braden R. Allenby, American Telephone & Telegraph Co.'s senior environmental attorney.

Companies that make this shift will do more than clean up or prevent their own pollution. They'll make and distribute a product more efficiently than ever, worry about its lifelong environmental impact, plan for its recycling, and get their suppliers on the bandwagon. Such efforts will "demand a new mind-set, new tools, and adjustments throughout the organization," says Thomas N. Gladwin, professor of management and international business at New York University. But there will be a reward—what Monsanto Co. Chairman Richard J. Mahoney calls a chance to "reengineer cost structures." If 3M achieves its 1995 goal of reducing air and water emissions 90% and solid waste 50% from the levels of 1990, it will "cut the inflation-adjusted cost per unit of most products by 10%,"

declares L. D. Desimone, 3M's chairman.

Hearing such talk, some companies are making an ambitious start. Monsanto, Du Pont, and AT&T, like 3M, have sharply cut air emissions and waste, using recycling and less toxic materials. They'll creep toward a stunning "closed loop" manufacturing that has no discharges. Dow Chemical Co.'s ethylene plant in Fort Saskatchewan, Alberta, will release just 10 gallons of cleaned-up wastewater per minute into the North Saskatchewan River, compared with 100,000 gallons for such plants today. That also will use 40% less energy. It will cost 8% more than usual, but Dow expects to recoup that in lower maintenance costs. **TRICKY JOB.** Dow also is taking on grave responsibility for the chlorinated solvents used to clean industrial equipment. For now, it is teaching customers to get by with less. That hurts sales but cuts emissions. Soon, Dow may phase out used solution, reclaim the solvents, and incinerate what's left. Ultimately, it plans water-based substitutes. They may be harder to use, so Dow will design bath-like cleaning equipment to

g nations can export more value-added products to spur development. But it also has the potential to push environmental standards to the least common denominator or encourage industries to migrate to countries with lax environmental laws. And freer trade, which ends buyers to where goods are cheapest, could spur more commodity agriculture in developing countries at further environmental cost. Resolving such conflicts would pose huge challenges for sustainable development.

LAME-SHIFTING. Another barrier is the radically different perspective of nations. Developing nations blame wealthy ones for excessive consumption and pollution—and bristle at the idea that they could do otherwise unless the rich want

to help pay. Officials of wealthy countries insist that corruption and poor management are often to blame for lack of capital and poverty in developing nations. They add that developing nations must show proof of the changes they'll make before they can expect an influx of aid. Nor are industrialized countries united on the urgency for sustainable development. Compared with the U.S., "the Europeans are further along in their understanding of the idea," says Elkington.

It's no wonder, then, that as the final preconference meeting broke up in April, many key issues were unresolved. Nevertheless, supporters of sustainable development believe that their vision will eventually win out. "We are all partners

in the same boat," says Brazil's President Collor. Rio, Strong adds, is proof that "we are inexorably moving ahead." Already, Holland, Norway, Germany, and Sweden have approved long-term plans for integrating economic activity and environmental protection. Denmark expects to cut its CO₂ emissions 20% from 1988 levels by 2000.

It may take generations before development is reconciled with nature, if ever. "We're at the foot of a steep and rocky path," says Schmidheiny. Still, poisoned rivers, lost forests, fouled skies, and the poor will be constant reminders that sustainable development, by whatever name, may be a life-saving quest.

By Emily T. Smith in New York, with bureau reports

works. This setup will cost up to \$1 million, twice what customers pay for it, but it will use 90% less cleaning agent, says Gregory R. Keeley, Dow's plant manager for advanced clean systems, and so be cheaper to run.

One of the trickiest tasks in all such efforts is assessing a product's environmental impact. One tool for the task is life-cycle analysis, an inventory of material energy consumed—and polluted—during a product's manufacture, use, and disposal. It can cost up to \$100 a product. And it isn't easy. In

doing paper, do you include the energy it runs the saw that cuts the wood used for pulp? And how do you weigh the relative impact and cost of releasing carbon dioxide versus using more water? Life-cycle analysis is helpful to companies as Procter & Gamble and Dow pick raw materials and set research-and-development priorities. Dow has decided to go general, reducing the material content of products is better recycling.

The next step is getting engineers and designers on board. Among others, is adding Design for Environment (DFE) software to its computer-aided-design tools.

These contain guidelines and procedures for making products easily recyclable by choosing the least harmful materials, minimizing hazardous waste and use in manufacturing. Neil Sbar, vice president of environmental materials and technology at AT&T Bell Laboratories, says the group is developing a rating system for DFE products. First out, in 1993, will be a business phone that's easier to recycle for recycling and uses compatible interconnections to minimize lead solder.

Ultimately, the roadmap to sustainable development may be "industrial ecology," the idea is to use the waste of

one process or company as raw material for another, much the way biological systems work. Several companies and the city of Kalundborg, Denmark, are making a pioneering stab at this.

SURPLUS HEAT. They want to conserve water, which is pumped from Lake Tissø seven miles away. So instead of condensing process steam and dumping it into a fjord, the coal-fired Asnaes power station sells it to a nearby Novo Nordisk enzyme plant and a Statoil refinery. The power plant also sells fly ash to a cement company and surplus heat to the city for

mean longer-term planning than companies do now, says Elkington. It would also depend on ways of measuring how a company's actions affect ecological systems. Among the most crucial will be accounting methods that assign to a product its environmental costs. The U. N. is working on this with the International Standards Accounting Board.

Another key would be a new mix of regulations, tax credits, and economic incentives—plus smoother relations between government and industry. Typically, the Environmental Protection Agency aims to control pollution. Sustainable development would stress prevention. The EPA is experimenting with this. Last year, it launched a program that will let more than 700 volunteer companies determine how to best cut emissions of 17 toxic chemicals—as long as the reduction is 50% by 1995.

The breadth of the sustainable-development agenda makes many CEOs squirm. At a meeting last January in Laguna Niguel, Calif., the consensus among 39 top executives was that only 10% of the world's chief executives accept the notion. U.S. companies in particular "are very nervous," says one American chief executive. That's because at its core, sustainable development implies slowing population growth and fighting world poverty—issues "most CEOs don't see as their concern or problem."

But then, attitudes change with time. And industry is at least getting started. "The question isn't, 'Have you achieved sustainable development?' The answer is always no," says David T. Buzzelli, vice-president for environment at Dow. "The question is, 'Are you moving toward it continuously?'"

By Emily T. Smith in New York, with David Woodruff in Detroit, Fleur Templeton in New York, and bureau reports

CORPORATE STEPS TOWARD SUSTAINABLE DEVELOPMENT

DOW CHEMICAL Within two years, the company may replace chlorinated solvents used for cleaning industrial equipment with less-polluting, water-based systems

AT&T It's developing systems to help its product developers design environmentally sound products

THE KALUNDBORG FOUR In this Danish town, a power plant, enzyme plant, refinery, and wallboard plant use one another's leavings or byproducts as raw materials, which cuts down on waste and pollution

BMW Using design for disassembly, it has a pilot project to build cars so they can eventually be taken apart and recycled more easily

DATA: BW

heating. Statoil in turn supplies Asnaes with treated wastewater for cooling. Statoil also sells the power plant desulfurized gas to burn, saving 30,000 tons of coal a year. And it ships high-sulphur gas to a sulfuric-acid plant. Asnaes, which removes pollutants from its smokestack by a process that yields limestone gunk, sells that to Gyproc, a wallboard maker that can now cut imports of mined gypsum. Surplus heat from Asnaes warms a fishery that produces 200 tons of trout and turbot a year. Local farms use waste from the fishery and from Novo's enzyme plant as fertilizer.

Such a shift on any wide scale would

THE IN-YOUR-FACE ECONOMIST AT THE WORLD BANK

Larry Summers' stinging analyses brook no political tip-toeing

Lawrence H. Summers wanted to make a point: Educating women is the best investment the developing world can make. So Summers, the World Bank's chief economist, wrote a speech marshaling extensive new research that demonstrates the economic rewards of educating females. Then he went to a surprising place to deliver his message: Pakistan, a country where only one-third of elementary students are girls and women are less than 10% of the labor force—some of the lowest ratios in the world.

The approach—an economic justification for what most people would view as a matter of social justice—was vintage Summers. And so was the delight he took in challenging his host country. "Some people thought I was the greatest thing ever to come to Pakistan," he recalls with a grin. "Others thought America has 20 million latchkey kids because of the sort of ideas I was pushing."

In the 16 months since he took the helm of the World Bank's economic shop, Summers, an iconoclastic liberal, has stirred up controversy aplenty and established himself as a global economic gadfly. The 37-year-old economist, on leave from Harvard University, has annoyed U.S. officials with his unsolicited advice on budget policy and angered Third World governments with his views on excessive military spending and the environment (table).

PROVOCATEUR. Summers' job at the World Bank, which lends \$23 billion a year to developing nations, puts him in charge of the world's largest, though least visible, body of economists. But he's taking a much higher profile than his predecessors did. "Past chief

economists have won high marks for prodding the bank from within," notes Richard E. Feinberg, president of Inter-American Dialogue, a Washington think tank. "Summers prefers to provoke people."

He succeeds—even when he would

rather not. In February, environmental groups leaked a World Bank internal memo—signed by Summers—that came to some startling conclusions. Applying strict economic reasoning to environmental issues, the memo said that "underpopulated countries in Africa are vastly under-polluted... compared to Los Angeles or Mexico City." It asserted that "the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable."

The "toxic memo" set off a storm playing directly into environmentalists' long-held suspicion that the World Bank pushes development at the expense of ecological concerns. Bank President Lewis T. Preston, on his inaugural visit to Africa when the memo leaked, denounced it as "outrageous" and was forced to defend the bank's program of environmental lending.

Summers issued an internal apology for the memo before it leaked to the press and now misses no opportunity to say that it was a mistake. "It took an aggressively sarcastic tone to try to put some rigor into a very muddled discussion of environmental and trade issues," he says, calling it "a very regrettable attempt to provoke thought."

TOUGH TESTS. Yet some bank officials say the toxic memo hit squarely on one of the key problems confronting international aid today: whether the environment should take priority over the efforts of poor countries to feed, educate, and employ their people (page 6). Summers believes the two can be mixed. In the bank's *World Development Report*, due at the end of this summer, he'll argue that economic reforms—for example, giving landowners incentives to manage forests—can solve many Third World environmental problems. Hardcore activists are already grumbling that the report's cost-benefit approach undercuts the environment. The complaints don't faze Summers, who concludes: "Poverty is the greatest environmental problem of all."

Summers comes to his faith in economic reasoning almost genetically. His parents are both economists, and two of his uncles—Kenneth J. Arrow and Paul A. Samuelson—re-



WHY SUMMERS IS STIRRING CONTROVERSY

ECONOMIC POLICY Criticizes Washington for failure to control deficits. Compares conditions of America's poor with the Third World

INVESTMENT Advocates tax credits for equipment spending. Is against cutting the capital-gains tax

ENVIRONMENT Signed a memo proposing using low-wage countries as good sites for toxic-waste dumps. Argues that poor countries can best protect natural resources by more development, not less

WOMEN Argues that spending on educating girls in developing countries will yield higher returns than any other investment

MILITARY SPENDING Questions aid to poor countries that spend more on arms than on health and education

DEVELOPING ECONOMIES Advocates privatizing state-owned enterprises. Pushes the idea of 'market-friendly' government

FORMER SOVIET UNION Tells new republics to preserve trade links, cut subsidies, promote stable currencies, and speed privatization

DATA: WORLD BANK, BW

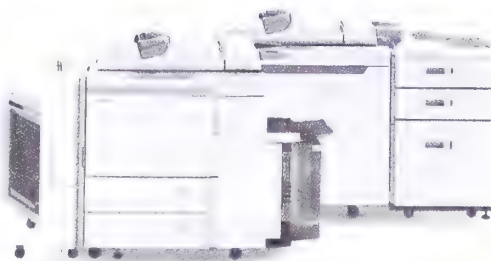


“If our copiers are working,
our people are working.”

The performance of your high-volume copying systems is vital to the productivity of your organization.

That's why we're proud to offer The Corporate Line of highly productive high-volume copying systems—copiers uniquely created for the demands of companies like yours.

The Corporate Line, featuring the NP 9800 and our new NP 6060, was designed for durability day in and day out. These copiers take productivity beyond delivering more



THE CORPORATE LINE

copies per minute. With fast first copy speeds so your people spend less time completing short runs. Sophisticated document handling and finishing capabilities for complete stapled sets at the touch of a button. And innovations like the largest paper capacities in the industry so your people spend less time at the copier, and more time working.

The Corporate Line, from Canon. For ten years, America's #1 copier company. And now the new power in high-volume copying. Call 1-800-OK-CANON.

Canon

Nobel laureates in economics. Summers received his Harvard PhD in 1982 and became a full professor in 1983 at age 28—one of the quickest ascents in the university's history. He is expected to return to Harvard in September, 1993.

Summers has written extensively on more topics than almost any economist of his generation, ranging from unemployment to taxation to the efficiency of financial markets. While he hasn't revolutionized any single field, the breadth of his work makes him the odds-on favorite to win the John Bates Clark Medal, the American Economic Assn.'s prize for the best economist under age 40, the next time it will be awarded, in 1994. He has also applied his talents to policy-making as a senior researcher for Martin S. Feldstein when his mentor chaired President Reagan's Council of Economic Advisers.

Despite his service to Reagan, Summers is a Democrat who advised Michael S. Dukakis during in the 1988 Presidential campaign. But the Bush Administration chose not to block the hiring of a former adversary at the bank, where the U.S. is the largest shareholder.

LONG ODDS. It may yet wish it had. While he's careful to say that he's not speaking for the bank, Summers is enjoying a Democratic economist's dream, lambasting a Republican Administration's budget deficits and policies that discourage savings and investment. He has also made some comparisons that the Administration finds uncomfortable: "A child born in Shanghai is more likely to survive to age one, more likely to become literate, more likely to graduate from high school, and more likely to live to be 75 than a child born in New York City," Summers recently told a gathering of liberal economists.

Within the bank, Summers is pushing a model of "market-friendly" government, striking a balance between free-market ideology and the bank's historical preference for lending to government-dominated projects. He's directing a massive study of Japan and other East Asian countries, seeking the secrets of success for their mixed systems. "We have lost sight of the role of government's supporting hand in our enthusiasm for the invisible hand," says Summers. "Some government intervention is good, and that's as true in the U.S. as it is in Mali."

Not surprisingly, such comments get under the skin of U.S. officials. "He's supposed to be a development economist, but he's wandering pretty far afield," says a senior Treasury official. Well, Summers has never shown much interest in pleasing the local powers, whether in Washington or Islamabad. And he's not about to start now.

By Mike McNamee in Washington

The Corporation

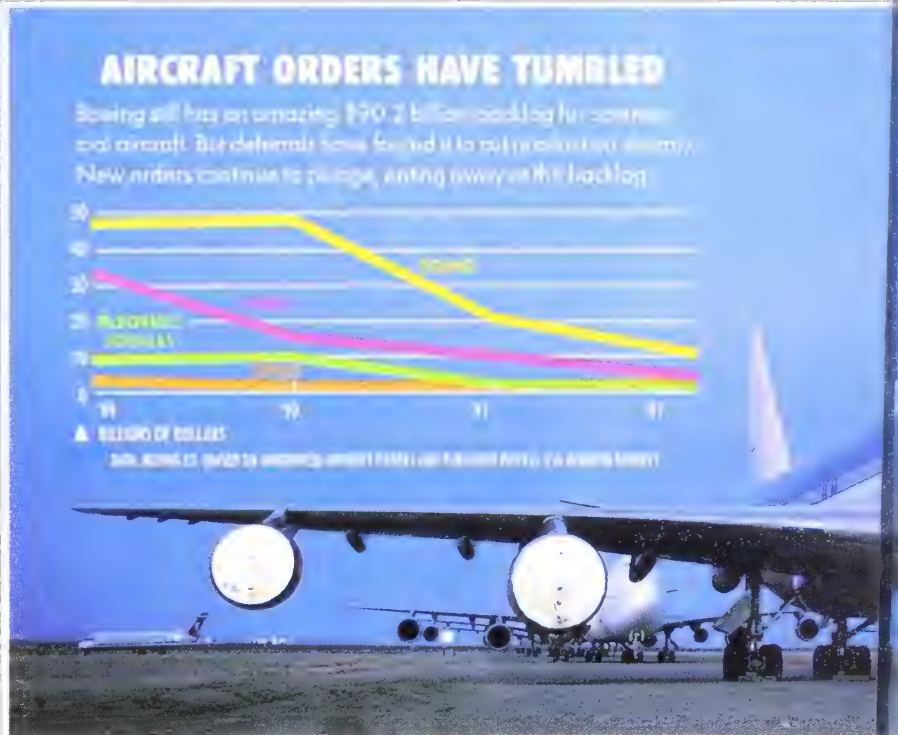
TRANSPORTATION

WHY BOEING DOESN'T HAVE THE ALL-CLEAR YET

The company looks strong, but there's still foul weather ahead

When nearly 70 hard-bitten Wall Street analysts flew to Seattle to visit Boeing Co. in March, Alan R. Mulally, who heads the engineering team designing Boeing's 777 jet, wowed them with his enthusiasm about the new, computerized design process. "That guy must eat pixie dust for breakfast," says Howard A. Rubel, C. J. Lawrence Morgan Grenfell Inc.'s aerospace

Despite a steep decline in new orders last year, Boeing has weathered the recession remarkably well, selling enough jets to keep its backlog from shrinking. Its first-quarter income for 1992 jumped 43%, to \$441 million. And even with defense cutbacks, Boeing's military business is returning to profitability after four years, thanks in part to a major streamlining. The country's largest ex-



analyst. "Nine out of 10 people in that room would have gotten up and followed him wherever he went." But when the analysts returned to New York, not one recommendation was upgraded—not even Rubel's, which has carried a "hold" rating for 14 months. Investors are so bearish that the company has been trading at its worst multiple relative to the market since it imploded in the early 1970s.

At Boeing headquarters, the pessimism is hard to fathom: The company has a rock-solid balance sheet, a mammoth \$90.2 billion backlog of orders, and three years of rising sales and earnings.

porter even managed to gain market share in 1991 against Airbus Industrie, an aggressive, European government-supported rival. Boeing won 64% of the world's commercial jet orders, in dollars, up from 61% in 1990. "I'll take that set of disastrous year anytime," says Richard R. Albrecht, Boeing's executive vice president for sales and marketing.

Now, the bad news: The fall-off in new orders that Boeing has insisted was a short-term setback may last much longer. After peaking at 1,662 in 1990, worldwide orders of all aircraft fell to 439 last year—not including cancellations. Edmund S. Greenslet, publisher

The Airline Monitor, expects orders to fall to around 250 this year. So far, Boeing has booked 63 orders.

Deferred deliveries, which some see as cancellations in disguise, compound the problem. The company's stock dropped sharply after United Air Lines Inc. and American Airlines Inc. announced plans to postpone deliveries and cancel options of new Boeing planes worth \$9 billion. And on Apr. 29, Delta Air Lines Inc. announced it would cut capital expenditures by \$5 billion by 2001 and reduce planned acquisitions by more than 100 airplanes—some from Boeing.

Meanwhile, Continental Airlines Inc.'s 10 orders for 737s and 25 for 757s—equivalent to three months of production piece—remain tied up in bankruptcy court. Industry executives say Northwest Airlines Inc. may do some "fine-tuning" to orders as well. Plus, a near-record 736 used jets are available worldwide for sale or lease—at low prices that may persuade some airlines

Nippon Airways Co., both big Boeing customers. Lower debt ratings and the evaporation of Japanese capital will make it tougher than ever for airlines to find financing. Noting that many former lenders are pulling back, James A. Paduano, a general partner at Lazard Frères & Co., says it will take one to two years for new players to gain the confidence to lend significant amounts.

Increasingly, Boeing has had to step in and offer its own customer financing, vying with archrival Airbus to offer ever-more-generous packages. "It's the nature of the market at the moment," says David Jennings, marketing vice president for Airbus Industrie. "It's not something we do willingly."

Airbus is targeting longtime Boeing customers. United, Boeing's biggest customer, is now flirting with Airbus. Louis J. Valerio, a United senior vice-president, says Airbus' A320 may be a better plane for United than Boeing's 737-400. "It carries more passengers and has good

fuel efficiency," he says. Soon, Boeing may even have to worry about competition at the high end of the market, which the manufacturer has had to itself for 20 years. Boeing's highly profitable 747 will come under attack if both Airbus and McDonnell Douglas Corp. produce four-engine jumbo jetliners that could carry 200 more passengers than Boeing's 747-400.

Until January, Boeing was able to shift deliveries to healthier airlines eager for new planes. But demand for narrowbodies has fallen so drastically that Boeing will have to sharply cut production of the 737, its smallest model, from 21 to 14 per month, starting in October. Boeing insists it has no plans for further cuts, but analysts worry about the 757, a more modern narrowbody. GPA Group PLC, the world's largest leasing company, has predicted a 42% cut in worldwide deliveries of narrowbodies by 1995.

The production cut hurts. Boeing will still be able to increase deliveries to 440 this year—a world record for commercial aircraft. But it's downhill from there. The company has already announced plans to slash employment by more than 8,000 this year, half because of defense cuts and half because of the 737 slowdown. It has laid off 854 of the 7,600 people to whom it has given warning notices so far. And another big round of layoffs is expected to be announced on May 8. Although demand for pricier widebodies remains strong,

Boeing's revenues will suffer as deliveries slow further. And analysts worry that earnings, already burdened by heavy spending on research and development and new factories, will drop, too. At the most bearish end of the spectrum, George D. Shapiro of Salomon Brothers Inc. predicts that Boeing's earnings will fall sharply after 1992.

Boeing executives say that they are not worried. New orders are coming in from such strong Asian carriers as Cathay Pacific Airways Ltd. and Thai Airways International Ltd., and some options are being exercised. Orders jumped 93% for 1992's first quarter, though the comparison must be tempered, since 1991's (during the Persian Gulf war) was particularly weak. Boeing expects orders to rise six to nine months after airlines regain profitability. Meanwhile, it can afford to eat into its backlog, which is more than three times the \$25 billion worth of planes it expects to deliver this year.

NO QUESTION. Boeing's long-term forecasts are positively rosy. The company expects air traffic to grow 5.2% per year this decade and next, down from the 7.2% growth of 1970 to 1990. By 2010, Boeing expects air traffic to triple. No one questions that Boeing's long-term prospects are very strong. But to stock analysts, "the next 20 years don't matter—the next six months do," says Cai von Rumohr, an analyst at Boston's Cowen & Co.

Boeing hopes its backlog of pricier widebodies will keep profits from falling. But the company is spending a hefty \$1.8 billion on R&D this year, mainly to develop its new two-engine widebody, the 777. Upfront costs are higher than usual because it's doing all the design by computer, hoping to save later by avoiding costly reworking of errors on the factory floor. So far, all has gone smoothly. But if glitches pop up, Boeing might not be able to cut R&D costs to the \$1.4 billion to \$1.6 billion range, as it expects to next year.

At the same time, Boeing execs must start thinking about whether to proceed on a superjumbo, larger than the 747, and a supersonic jet. Such decisions force them to think long term, doubling their frustration with the Street's short-term focus. In January, the company even hired its first investor-relations specialist to push the message that Boeing's prospects must be judged long term. "Our business is not without its risks and cyclical fluctuations," Chairman Frank A. Shrontz told investors at the annual meeting, "but I'm very bullish about our future." Maybe so, but asking Wall Street to wait several years for that future is a tall order indeed.

By Dori Jones Yang in Seattle, with bureau reports



forgo buying new planes. Says Steven Udvar-Hazy, president of International Lease Finance Corp., the world's second-largest aircraft-leasing firm: "We've seen roughly half of the bad news."

The other half may come if the industry's long-awaited recovery doesn't materialize. U.S. airlines had expected strong profits in 1992, but hopes for that are waning as new fare wars cut into the bottom line. European carriers will also find themselves financially pressed as U.S. airlines step up competition. And a Japanese recession is eating into profits at Japan Air Lines Co. and All



**WAS A GREENVILLE (S.C.) OFFICE BUILDING OVERVALUED—AND WHEN D
LEGO KNOW HOW BAD THINGS WERE?**



MANAGEMENT

DOES EVERYTHING ADD UP AT WESTINGHOUSE CREDIT?

Some shareholders allege the company inflated the value of its real estate to avoid write-downs

For Westinghouse Electric Corp., last year was a low-water mark. Sick real estate loans in its high-flying financial-services business produced two shocking write-offs totaling \$2.6 billion and sent its stock tumbling. But after recording a \$1 billion loss for the year, management vowed the worst had passed.

The bad news from its Westinghouse Credit Corp., however, may not be over. Several current and former executives predict that still-weak real estate values will result in yet another write-off, ranging from \$500 million to \$1.5 billion. Although Westinghouse insists that its loss reserves are adequate, there's also talk within the company of further restructuring, including selling off nonfinancial assets such as its radio stations. Perhaps most troubling of all, the parent company can't seem to get the Securities & Exchange Commission to sign off on a new \$500 million preferred-stock offering. While the SEC usually allows offerings from blue-chip companies to go forward in a few days, it has been scrutinizing this one since Westinghouse registered for it on Feb. 7.

What's the delay? The SEC won't say, but one top Westinghouse official says

regulators have barraged the company with "stacks" of written questions and have had a running dialogue with company lawyers about a host of sticky issues. These include shareholder allegations in several lawsuits that the company fraudulently hid from investors the deteriorating condition of its financial-services unit. Although it's not a full-scale SEC investigation, says an individual close to the situation, that would be the next step if regulators found any wrongdoing. Westinghouse, which denies any misdeed, insists there's nothing unusual about the SEC taking so long to approve its stock offering.

'COLOSSAL COVER-UP.' Westinghouse may not have broken any laws at Credit Corp., but it clearly went to extraordinary lengths to avoid write-downs from 1987 through mid-1991, a *BUSINESS WEEK* investigation shows. Unhindered by the stiff property-valuation regulations required of banks, the company often inflated the value of its real estate portfolio, shareholders allege in several lawsuits. Further, Credit Corp. routinely used questionable and sloppy accounting practices, according to interviews with more than three dozen current and former Westinghouse employees, investors,

and customers. In a response to written questions from *BUSINESS WEEK*, Westinghouse denies the shareholder allegations and says it always operates in accordance with generally accepted accounting principles.

Some insiders complained of problems brewing at Credit Corp. as far back as 1987. But one reason senior management failed to disclose Credit Corp. real estate woes sooner was to preserve their year-end bonuses, investors and insiders allege. "This is a case of colossal cover-up and mismanagement," claims Richard D. Greenfield, one of the lead attorneys in a class action filed on behalf of shareholders in the Pittsburgh U.S. District Court accusing Westinghouse of misrepresenting its financial condition. There was no effort to preserve bonuses, says Westinghouse.

The storm hit Credit Corp. in the late 1980s, when the torrid real estate market began to cool. In 1988, William Powe, then chairman of Credit Corp., adopted a strategy that was supposed to help it ride out its problems. Rather than taking over the floundering properties on which Credit Corp. held loans, he began shifting ownership of many of them to partnerships he had formed with

BREAKDOWN AT WESTINGHOUSE CREDIT

OBER, 1990 Three months after becoming CEO of Westinghouse, Paul Lego assures analysts that all is well at Westinghouse Credit Corp. and that no write-offs are expected

JUARY, 1991 Westinghouse announces unaudited record earnings of \$1 billion; its executives collect hefty yearend bonuses

RUARY, 1991 Citing worsening economic conditions, the company releases audited earnings that include a \$975 million hit

OBER, 1991 Westinghouse takes another \$1.7 billion write-off, producing a \$1 billion loss for 1991. William Powe resigns his post as chairman of Credit Corp.

RUARY, 1992 Westinghouse files a registration statement to issue preferred shares, needed to bolster WCC

IL, 1992 The SEC is still scrutinizing the proposal and, according to one top Westinghouse executive, looking into shareholder allegations of questionable accounting. Westinghouse says there is nothing unusual about the delay

DATA BW, COMPANY REPORTS



EX-WCC CHAIRMAN POWE

adre of longtime Credit Corp. customers, including the Tonti brothers of New Orleans, Krisch Hotels Inc. in Roanoke, Va., and Jerrold Wexler of Chicago (see page 83), according to a lawsuit filed against Westinghouse by the Tontis.

The Tontis claim they got 50% equity in the partnerships owning the buildings and the option to buy some of them outright. They say Credit Corp. issued them mortgages for an amount equal to the original mortgages with the understanding that the Tontis did not have to pay them back. This way, the Tontis allege, Westinghouse believed it didn't have to take writedowns on its problem real estate loans. "There was tremendous flexibility in an unregulated environment," says a current manager. "They would do anything they considered legally defensible."

DEALS. The Tontis say they were supposed to manage 30 troubled properties and try to arrange refinancing. But Westinghouse never wanted to go rough with any refinancing deals, the Tontis allege. In the fall of 1990, the Tontis had lined up a \$300 million package to refinance several Sunbelt apartment complexes with Llama Co. of Fayetteville, Ark., an investment boutique owned by Alice L. Walton, daughter of Sam Walton. But Westinghouse backed out of this deal and others, according to a source close to the Tontis, because it didn't want to publicly acknowledge the declining value of its real estate portfolio and take writedowns. "The company insists it did nothing wrong."

Early this year, the Tontis filed suit in U.S. District Court in Albuquerque alleging violation of their partnership

agreements with Westinghouse. The company says it is talking to the Tontis about resolving "what is actually a business dispute" out of the courts.

At other times, shareholders allege Westinghouse artificially inflated its properties' values and avoided getting independent appraisals. Work papers from Westinghouse's auditors, Price Waterhouse, obtained as part of a shareholder lawsuit's discovery, show that the appraisals of numerous delinquent buildings were based on distant future dates when it was assumed they would have high operating income and occupancy rates. Charles E. Kimball, an independent real estate economist who is familiar with Westinghouse's Florida proper-

**Says one current manager:
'[Westinghouse] would do
anything they considered
legally defensible'**

ties, describes this approach as highly unusual. The projects are so overfinanced, he adds, that they have "no chance of succeeding."

In late 1990, owners of the 25-floor Daniel Building in Greenville, S.C., hadn't made a mortgage payment to Westinghouse in over a year on a balance of \$17 million, according to court documents. At the time, the loan wasn't written down even though the 1968-vintage building had a current value of \$9 million. The reason: Westinghouse's appraisal assumed it would sell for \$34

million in the year 2000. This was despite a 25% vacancy rate and an asbestos problem that its owner, Howard E. Phillips, says will cost \$14 million to resolve.

Other times, Westinghouse would use "what if" appraisals that ignored the condition of raw land, according to court papers. As of December, 1990, the owners of a partially completed office complex called Centrepark near the Palm Beach (Fla.) airport had not made a payment in more than a year on a balance of \$26.6 million. Assuming the remaining 36.5 acres would be developed and fully leased, Westinghouse valued the land at \$11 million, shareholders allege. Still, there was no writedown to reflect the \$15 million difference. Calling its methodology "appropriate" and its appraisals "reasonable," Westinghouse says it will demonstrate in court that it was not trying to defraud investors.

NUMBERS GAME. Some former Credit Corp. executives describe an antiquated accounting system and insufficient support systems during the unit's boom years—charges that Westinghouse denies. Vallerey Stylianoudis, the corporate accountant from 1987 until early 1988, claims in an interview that Credit Corp.'s accounting was so disorganized that she "couldn't complete financial statements according to accepted accounting standards."

Getting the numbers to come out right was a quarterly ritual, she says. Top Credit Corp. executives and Price Waterhouse representatives would gather at headquarters in the Disco Room—named for its flashy metallic furniture and modern lighting—and emerge with numbers that balanced, she says. "Ridiculous," says Westinghouse. Price Waterhouse did not respond to BUSINESS WEEK's calls seeking comment.

Failing to acknowledge troubled real estate loans was the most common device Credit Corp. used to show quarter-to-quarter gains, Stylianoudis and other former executives say. For the third quarter of 1987, Credit Corp. made no mention of mounting problem loans in Texas and Oklahoma in its financial reporting, and reserves were held to a minuscule \$24 million, 60% below the year-earlier level, Stylianoudis says. That quarter, Credit Corp. posted a 21% earnings increase, to \$31 million. While alleging no illegality, a current executive says it was routine for "accountants to put in the numbers they were told to by management." Replies Westinghouse: "Credit Corp. management and Price Waterhouse acted professionally in all respects."

Westinghouse describes Stylianoudis as a disgruntled former employee. She is definitely not a happy one: Fourteen

The Corporation

months ago, she filed a federal lawsuit alleging her boss ruined her Westinghouse career because she refused his sexual advances. The suit is pending. Her boss denied making any advances, and Westinghouse disputes her claims.

FAT BONUSES. Still, someone evidently wants to keep her quiet, she says. Before being let go last December, she supplied information about alleged improper bookkeeping to federal agencies, including the SEC. Soon, her car was allegedly run off the road near her Westinghouse office, and her family received numerous telephone death threats, she claims. As a result, she and her family have moved to Washington, D. C., where she is completing law school and working as an intern in the SEC's enforcement division. The Federal Bureau of Investigation confirms it is investigating the alleged threats, which she says have continued. Any suggestion that Westinghouse was involved is "preposterous," says the company.

Paul E. Lego, who became Westinghouse chairman in July, 1990, at first bought into Powe's strategy that Credit Corp. could weather the storm without a major hit. But by fall, 1990, there was no denying there were big problems.

Lego has said that he brought in Lazard Frères & Co. in September, 1990, to help devise a new strategy. By December, Lego said that Lazard was assigned an in-depth asset review, which wasn't completed until February, 1991. But one former top-level executive says that Lazard actually started meeting with Credit Corp. officials in June, 1990, and the company suspected by November that some kind of write-off would be necessary. Shareholder attorney Greenfield is certain of it. Based on his discovery in the class action, much of which is under protective order, "the board and Westinghouse management had detailed information by late summer about the problems," he says. Westinghouse denies it.

The chronology might not be important except that Westinghouse awarded fat 1990 bonuses based on unaudited record earnings of \$1 billion, announced on Jan. 17, 1991. On Feb. 27, 1991, Westinghouse announced the first billion-dollar write-off, about half from real estate, and lowered earnings by 73% for 1990. Lego explained in a March, 1992, interview that the board considered the first write-off an extraordinary item and chose to leave the bonuses in place.



But it was just the beginning. Laurence A. Chapman, then chief financial officer at Credit Corp., resigned last August after refusing to sign off on financials, according to a half-dozen current and former executives. He had complained the first write-off was severely inadequate and that accounting practices were improper, they say. After the second big hit last October, Chapman was rehired as treasurer at the parent company. He declined to comment.

Despite the pain of the write-offs, Credit Corp. still isn't back on its feet. Its strategy of putting the skids on new

WHO OFFERS POLICYHOLDERS SOME OF THE BEST THINGS IN LIFE?

Westinghouse Credit went to great lengths to avoid write-downs on its real estate until 1991, according to shareholder lawsuits and current and former executives. Following is an example of one tactic the unit used, these sources say:

1 In the mid-1980s, WCC lent some \$230 million to several developers to build about 30 apartment complexes in the South and Southwest.

2 When the real estate market soured, most of the developers went into default. But rather than foreclosing on and writing down the properties, starting in 1987 WCC shifted responsibility for them to the Tontis brothers, big New Orleans developers. The Tontis say they were to manage the buildings and refinance them when possible.

3 WCC replaced the properties' original mortgages with new ones for the Tontis, the developers say. Totalling around \$230 million, the mortgages were equal to the full amount of WCC's original loans, former and current executives say. And because it didn't take ownership, they add, WCC didn't take write-downs to reflect values that had fallen sharply.

4 The Tontis sued WCC, charging violation of their partnership agreement. When the Tontis tried to refinance some of the properties, they allege in the suit, WCC refused because it didn't want to take write-downs. Westinghouse denies any wrongdoing.



real estate loans while unloading assets going nowhere in the current market. Of the \$1.8 billion in real estate assets Credit Corp. put on the block, it has sold less than \$200 million.

If Westinghouse doesn't get some relief from an improving economy, it might have to consider more asset sales. Management has shown it is willing to consider just about anything. Last November, a senior management group, including Lego, went to Tokyo to renegotiate power-plant licensing agreements with Mitsubishi Heavy Industries. Here, Westinghouse explored the idea

of selling Mitsubishi the whole company for a premium of 20% over its \$3.7 billion book value, according to a source who was involved in the talks. Westinghouse denies such talks ever took place.

'DREAM WORLD.' Now, the company's cash requirements are mounting, and several Wall Streeters question whether Westinghouse can successfully float new, reasonably priced debt. Westinghouse says it has plenty of cushion, with two-thirds left on the \$6 billion line of bank credit it lined up last December. Still, trying to sell more shares now—when its common stock is 40% off its 52-

week high of 30—suggests a certain desperation.

Lego naturally would like to assuage such fears, so he continues to talk optimistically about a turnaround. "1992 will be a year of working to get our problems behind us," he said at an Apr. 29 annual meeting. But plenty of investors remain skeptical. "This company is in some sort of a dream world," says one investment banker who is familiar with Westinghouse. For many, it has been more like a nightmare.

By Michael Schroeder in Pittsburgh, with Leah Nathans Spiro in New York



You'll find some of the very best things in life among the diverse array of funds that back our variable life insurance products.

Two of these variable life funds, for example, were rated the number one performers in their classes in 1991 by Lipper Analytical Services, Inc. These and other Equitable funds also rank as top performers over two, three and ten years.*

Solid investment performance takes know-how. The Equitable has it. The Equitable Capital Management professionals who manage these top-rated funds average 17 years of experience.

To learn more about The Equitable, write to Richard H. Jenrette, Chairman and CEO, or Joseph J. Melone, President and COO, at The Equitable, 787 Seventh Ave., Dept. A, New York, NY 10019.

THE EQUITABLE

Variable life insurance policies are issued by Equitable Variable Life Insurance Company, a wholly-owned subsidiary of The Equitable Life Assurance Society of the United States. All ratings are for periods ended December 31, 1991, as calculated in the Lipper Variable Insurance Products Performance Analysis Survey (VIPPAS). According to Lipper Analytical Services, the Lipper VIPPAS universe consists of nearly 400 mutual funds that underlie variable life and variable annuity products. All of the funds included in these rankings report performance net of investment management fees and direct operating expenses. The performance data Lipper uses to calculate rankings do not reflect insurance-related costs, expenses or sales charges which would reduce the return to policyholders. The Global Portfolio was ranked #1 out of 8 and 11 global funds, respectively, for the three- and one-year periods; the Asset Allocation with Investors Portfolio was ranked #1 out of 35 and 41 flexibly managed funds, respectively, for the two- and one-year periods; the Common Stock Portfolio was ranked #2 out of 9 equity funds for the ten year period.

© 1992 The Equitable Life Assurance Society, NY, NY. Equitable Variable Life Insurance Company

NASTY ENCOUNTER OF THE '90s KIND

Ex-allies Leon Black and Carl Icahn may be headed for a court battle over a high-stakes bankruptcy

On Wall Street, friendships have a way of vanishing with the turning of a market cycle. Consider Leon D. Black, the former merger-and-acquisition chief at Drexel Burnham Lambert Inc., and his erstwhile client and poker buddy Carl C. Icahn, the raider who controls Trans World Airlines Inc. Over the past four years, Black and Icahn have taken five family vacations together. But not this summer. Allies in the takeover wars of the '80s, Black and Icahn are antagonists in the restructuring battles of the '90s.

Black and Icahn are widely entangled, with overlapping—though not always competing—interests in a half-dozen companies (table). The focal point of their conflict is Gillett Holdings Inc., a Colorado ski-resort operator in Chapter 11. Over the year-and-a-half that Black has been maneuvering to gain control of Gillett, he has negotiated every mogul but one: Icahn, who has responded to each of Black's concessions by demanding new ones. Now, a showdown looms. On Apr. 30, Gillett was expected to file a revised plan of reorganization that grants most but not all of Icahn's latest demands. Black has let it be known that he's through making concessions. If Icahn doesn't capitulate, a bare-knuckles court battle is likely.

No one fights nastier than friends turned enemies. Both Black and Icahn insist privately that their dustup over Gillett isn't personal—just business as usual in the bruising restructuring field. But many of their fellow "vulture" investors suspect otherwise. "The feeling I get from talking to Icahn's people is that Carl would take great pleasure in screwing up Apollo [Investment]," says one veteran speculator, referring to Black's principal investing vehicle.

At 56, Icahn has been speculating profitably in troubled compa-

nies since before the 40-year-old Black got out of Harvard business school. Recently, though, the term "bankruptcy play" has taken on a painful dual meaning for Icahn. On Jan. 31, he suffered the worst setback of his long career in putting TWA into Chapter 11. Once a billionaire, Icahn is now thought to be worth around \$600 million.

VULTURE CAPITAL. It can't have escaped Icahn's notice that Black's fortunes have been heading rapidly in the opposite direction. In less than two years, Black has transformed himself from an out-of-work investment banker into America's best-capitalized vulture investor. His \$100 million net worth is eclipsed by Icahn's, but Black boasts an unmatched

bankroll of \$4.5 billion, most of it supplied by Altus Finance, a subsidiary of French banking giant Crédit Lyonnais. In recent months, Black and his new partners have pulled off one coup after another. "At this point," concedes one rival, "to call Leon Black the king of restructuring is an understatement."

Black clinched predominance in March, when Apollo assumed control of a huge junk-bond portfolio that Altus bought from defunct First Executive Corp. for \$3.25 billion. Included were holdings that Apollo has already parlayed into nominally controlling equity stakes in Memorex Telex Corp. and Col National Corp. In Black's estimation, the 300-company portfolio contains an additional two dozen similarly promising positions, half of which Apollo is pursuing.

In none of its other restructuring plays has Apollo put its prestige as squarely on the line as it has with Gillett. For on-

Black often allies with the execs who got companies into trouble in the first place



WHERE BLACK AND

GILLETTE HOLDINGS The latest restructuring plan calls for Black's Apollo to swap some \$300 million in securities for a majority of the new stock. Icahn owns one-third of the junior class of debt and has been buying out for more than the 16¢ on the dollar offered him for his \$65 million holding

INTERCO Under a plan O.K.'d by creditors' committee, Apollo would lay its \$200 million in bank loans and controlling equity interest. With \$100 million in several classes of debt, Icahn spread too thin to block Black outright. He is looking for allies

MEMOREX TELEX Black and Icahn operated in a remarkably swift Chapter 11 reorganization completed in January. But peace may not prevail much longer. Apollo emerged as the largest

hings, the company's renowned Vail Mountain and Beaver Creek Mountain ski resorts give it a high-profile glamour that the likes of such other Black targets as Interco Inc. and E-II Holdings Inc. can't touch. Then, too, the battle over Gillett turns on the most distinctive element of Black's approach to bankruptcy investing: his willingness to ally himself with the execs who got a troubled company into trouble in the first place. In Gillett's case, Black's involvement is even more controversial because it is not without blame for its woes.

As Drexel's M&A chief, Black advised under George N. Gillett Jr. on his company's disastrous diversification into television in 1987. Having overpaid both for the TV stations it acquired and for the financing provided by Drexel, Gillett was so strapped by mid-1990 that it defaulted on several junk-bond issues. Gillett's initial, grudging attempts at restructuring so annoyed its junior creditors that in March, 1991, three of them took the unusual step of filing a petition in federal court to force the company into involuntary bankruptcy.

Enter Black, who well understood the value of the lucrative ski business that was buried under all that debt. Black was keen on making a play for Gillett that he couldn't wait for the negotiations with First Executive to run their course.

In a separate transaction with First Executive completed a year ago, Apollo bought senior Gillett securities with a face value of \$185 million. Apollo augmented its Gillett holdings with purchases from other sources, bringing the firm multiple

blocking positions. Typically, a sweeping financial restructuring requires two-thirds approval from each of a company's creditor classes, no matter how lowly. Thus, investors who accumulate more than one-third ownership of any class can singlehandedly block a plan, but not indefinitely. Because companies tend to expire in protracted captivity, bankruptcy judges can impose terms on recalcitrant companies and warring creditors—a move known as a cram-down.

Other bankruptcy investors generally welcome Black's involvement. As a rule, Apollo usually maximizes its clout by buying a company's highest-priority claims, yet it's more flexible than the banks and other creditors it replaces. "If Leon comes in, that's wonderful news, because he's willing to compromise and get things moving," says Hubert Stiles Jr., who runs The Recovery Fund for T. Rowe Price Associates Inc. "He doesn't fight over the last nickel."

By contrast, Icahn usually builds lower-cost blocking positions in junior securities. In Gillett, for example, Icahn owns \$65 million, or about one-third, of its lowest-ranking junk bonds. And whereas Black holds himself out as a peacemaker, Icahn most often assumes



SKI-RESORT FOUNDER
GEORGE GILLETT JR.

the role of wily guerrilla fighter. Disdaining membership on official committees, he surfaces unpredictably to harangue a company's management and file dissident motions. While Icahn's aim is to extract that last nickel for himself and fellow bondholders, the broadsides he aims at self-serving executives are often on target.

By February of this year, lengthy negotiations involving Apollo, the company's other debtors, and George Gillett produced a plan acceptable to the creditors' committee. Apollo would inject \$40 million in cash and receive about 60% of the stock in the restructured company. For \$1.5 million a year in salary plus other inducements, Gillett would stay on as CEO while surrendering all but 5% of his equity ownership. In exchange for newly issued notes and stock, the creditors (Apollo included) would cut their claims to \$600 million from \$1 billion.

PUBLIC BLAST. Largely in response to complaints from Icahn, the payout to Icahn's class was raised to nearly 16¢ from 10¢ on the dollar, and its members got the option of receiving cash or stock. The response: Icahn not only balked but publicly blasted Black for coddling George Gillett. After Gillett went ahead and filed its plan anyway, Black privately claimed that Icahn had agreed to terms but reneged at the last minute. Icahn denied it, implying that he was misled about the contents of the plan. Black vowed to "take off the gloves," presumably by inviting a cram-down.

Black was bluffing. Over the past few months, the creditors' committee capitulated to more of Icahn's demands in revising the plan. Under the Apr. 30 version, senior creditors would shoulder more investment risk by taking relatively more stock and less secured debt in the restructured company, which, as a result, would emerge from Chapter 11 carrying \$75 million less debt. In addition, the new plan diminishes George Gillett's hopes of restoring his vanished fortune by rescinding the CEO's options to repurchase stock issued to bondholders and to buy back certain corporate assets. Even some creditors who supported the first plan applauded the latter modifications.

Two critical provisions of the previous plan remain, however: Icahn and the other junk-bond holders would still get 16¢ on the dollar, and Apollo would still emerge with a controlling equity stake. Is Black's refusal to make further concessions another bluff? Is it cram-down time at last? The next move will be Icahn's.

By Anthony Bianco in New York, with Lisa Driscoll in New Haven

Icahn delights in haranguing company execs to extract every last nickel



IN SQUARE OFF

holder, with a 25% stake. Icahn owns 3% of the stock and has said he wants more shares

INDINGS With some \$300 million in assets, Apollo is the largest creditor. Icahn, too, is a major holder. So far, no conflict, but it's still early. The battle at a reorganization plan is expected by yearend

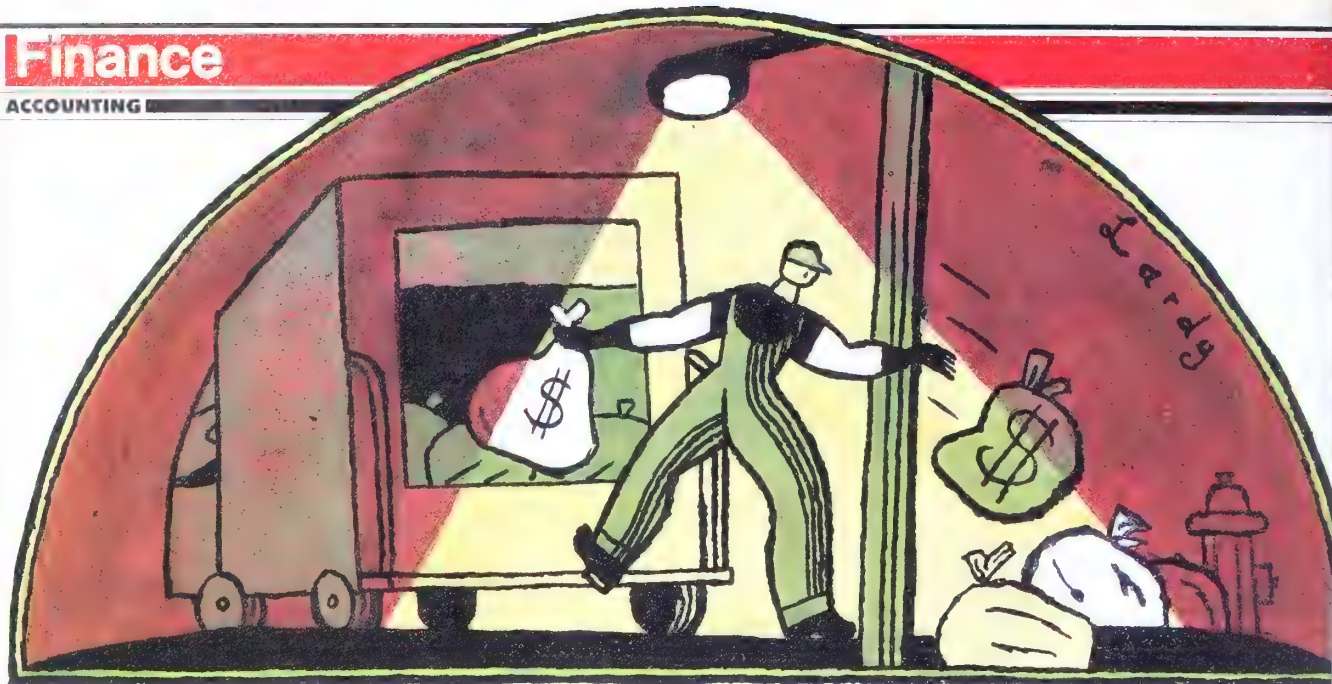
Included in the \$3 billion portfolio of Apollo acquired in March from First Executive were \$31 million in TWA bonds. Black didn't particularly want them and has no interest in making a deal for TWA

INDUSTRIES This Icahn-controlled company is performing well. Apollo would like to see the \$66 million in ACF bonds transferred to First Executive and watch to see if Icahn doesn't transfer assets from Apollo or TWA





you look closely, you can see yourself. The Accord Coupe. **HONDA**



BURYING TRASH IN BIG HOLES —ON THE BALANCE SHEET

Does waste-industry accounting sanitize the financial picture?

Garbage disposal has smelled like a financial winner for two decades. The mounting volume of solid waste has been a bonanza for Waste Management Inc., Chambers Development Co., and other titans of trash removal, sending their stock and earnings soaring. Trouble is, some of those financial gains may be due to liberal accounting—and that's raising a big stink and problems for the whole industry.

The most graphic example is fast-growing Chambers. Apparently forced by a tiff with outside auditors to publicly acknowledge some clever bookkeeping, Chambers on Mar. 17 refigured its financial results. The revision was stomach-churning: 1991 earnings of a tidy 83¢ per share suddenly sank to a mere 3¢. In response, the company's stock plunged by more than half, to 11½, in a single day; shares now trade at 7.

Yet Chambers, with revenues last year of \$355 million, is only one of the waste-disposal companies that seem to be playing cute tricks to beautify their bottom

lines (table). Although these maneuvers are evidently legal, they may give investors a distorted financial picture. "Accounting in the waste industry is too aggressive," complains Thomas M. Sprague, who runs Fidelity Investment Co.'s \$65 million Select Environmental Services Portfolio. "I don't think Chambers is going to be the last one to run into big problems" because of this.

WIGGLE ROOM. A big reason for the industry's behavior, says Abraham J. Briloff, professor emeritus of accounting at Bernard Baruch College of City University of New York, may be the nature of landfills, large holes where

garbage is buried. An asset such as a machine has a usable life that can be readily calculated. Nobody is certain, though, how long a landfill takes to fill up with trash. That gives accountants plenty of wiggle room in deciding how long to allow a company to depreciate landfills. The longer the period, the smaller the hit to annual earnings.

This is only one facet of a broad industry culture that seems to sanction aggressive interpretations of accounting rules. Look at how fast-growing Chambers booked expenses associated with developing landfills. Normally, indirect costs for such things as scouting sites and negotiating with municipalities are treated as current expenses. They customarily go in the present year's income statement. But Chambers, of Penn Hills, Pa., deferred recognizing these payoffs until later, spreading them over several years. Plus, it stretched the definition of development expenses to cover such items as public relations and the chief financial officer's time working on the projects. The upshot: lower expenses, higher earnings.

Although the company's stock was battered when these maneuvers were disclosed, the moves were at least permissible under accounting profession guidelines. But on Apr. 22, it disclosed in a filing that the auditors Grant Thornton, believed Chambers had double-counted some deferred expenses. Chambers then filed the firm. Now, aside from its market value

PUTTING A SHINE ON THE BOTTOM LINE

Some waste-disposal companies use aggressive accounting methods to enhance financial reports. Critics contend they are misleading. Companies maintain they are legal and proper. Among the disputed practices:

- ▶ Booking revenues a year or two before they are actually received
- ▶ Instantly boosting earnings by acquiring other companies using pooling of interest accounting methods
- ▶ Capitalizing instead of expensing indirect costs of finding and developing new landfills, which defers write-offs until future years
- ▶ Reducing financial reserves set aside to close filled-up landfills
- ▶ Cutting annual expenses by depreciating landfills for much longer than their usual life
- ▶ Using stock market gains of a company's interest in a subsidiary to raise earnings, instead of reflecting the gains on the balance sheet

a landfill operator faces 21 shareholder lawsuits and a Securities & Exchange Commission probe. The company denied comment.

Ogden Projects Inc. in some ways has been even more adventurous than Chambers. Through one apparent accounting shuffle, the company buoyed 1991's balance sheet by \$63.2 million, lifting stockholder equity by up to 24.9%, according to Robert L. Renck Jr., managing director of R. L. Renck & Co. Where did the increase come from? It's receivable income—due in 1992, 1993, and “thereafter,” according to Ogden Projects' latest annual report.

Unfortunately, the Fairfield (N.J.) thrift hasn't even billed its municipal customers for this yet. Robert M. DiGiam, Ogden's controller, concedes that the practice is “unusual” but argues that there's no question we'll get paid, unless the cities go bankrupt.”

WE DON'T PLAY GAMES. Consider also Houston's Sanifill Inc., the nation's No. 4 landfill operator. While it steadily adds more dumps, Sanifill has decreased the services it set aside in 1991 to close each waste facility once it is full. Sanifill argues that its studies now show this will cost less than expected. That's mainly why it lopped expenses by \$2 million last year—and hiked gross profits by the same amount. John H. Sanders, Sanifill's president for finance, calls the approach “reasonably conservative.”

The best-watched practitioner in aggressive accounting may be industry leader Waste Management, with revenues last year of \$7.55 billion. According to Douglas R. Augenthaler, an analyst at Oppenheimer & Co., the Oak Brook, Ill., giant bumped up earnings 6.8% last year by counting \$53.5 million in gains stemming from stock sales and other securities transactions by three subsidiaries. That's usually reflected on the parent's balance sheet by adjusting the (often higher) new value the market places on its stock in the subsidiaries. Instead, Waste Management lumped the stock appreciation in with its own earnings. Though SEC rules call for disclosing such gains as a separate line item, regardless of their size, there was no such item in the company's financial reports. Frances E. Koenig, Waste Management's chief financial officer, denies that it was trying to artificially inflate net income: “We follow proper accounting, and we don't play games.” The stock gain wasn't broken out, he says, because it is not “material.”

Then there's Waste Management's approach to the many acquisitions it makes. The company often opts to swap stock and use an accounting method called “pooling of interest.” Pooling avoids a cash outlay, and it allows Waste Management to book a newly

bought unit's entire year's sales and earnings, even if the purchase was on the fiscal year's last day.

Because it considers these purchases so small, the company doesn't follow the accounting rule for pooling that would make it restate prior years' results as if the new units had been aboard then. If it had restated, year-to-year gains may have looked less spectacular. Says Loren Kellogg, publisher of the *Financial Statement Alert* newsletter: “Just because the accounting literature allows for pooling doesn't mean it should be done.”

DOUBLE-BIND. Investors seem increasingly wary of Waste Management's moves. The stock has dipped from 46 in February to 40. Janus Capital Corp., Chambers' largest stockholder, has unloaded its entire Waste Management stake in recent weeks, 5.1 million shares worth \$200 million. Fidelity sold half its holdings in Waste Management late last year, partly owing to questions about

accounting, says Fidelity's Sprague.

Waste Management and Chambers are not the only companies getting hurt. On Apr. 27, Mid-American Waste Systems Inc. postponed an \$80 million common-stock offering, referring to the problems at Chambers as “souring a lot of institutional investors on waste stocks.” The Canal Winchester (Ohio) company's stock has fallen from 21 when it filed for the offering in March to 17½ on Apr. 29.

All of this is putting the industry in a severe double-bind. As investors get antsy, the industry now has new incentive to pump up profits. The reason: The waste industry's pell-mell growth is expected to slow. More landfills are on line, and the waste surge is leveling off, thanks to steps such as recycling. Waste companies practicing liberal accounting may end up like other things no one has use for—in the garbage.

By Julia Flynn in Chicago, with Wendy Zellner in Dallas

THRIFTS

GREAT WESTERN IS KEEPING ITS BRANDING IRON RED-HOT

The thrift is lassoing rivals and banking on an upturn

While addressing a junk-bond conference sponsored by Michael R. Milken several years ago, Great Western Financial Corp.'s chairman decided to inject a little levity into the proceedings. James F. Montgomery said he had “built a company, if you'll pardon the expression, with an investment grade.” He recalls that it took a few moments for the assembled junk mavens, who were promoting non-investment-grade companies with near-religious fervor, to get the dig. “I'm not sure they all appreciated it anyway,” Montgomery says.

Probably not. But it's hard to fault him for gloating. Located just down the street from Milken's now-shuttered junk-bond operation in Beverly Hills, Montgomery's thrift has prospered by keeping clear of the sort of high-risk debt and chancy loans that sank

many of Milken's customers. That's given Great Western the financial wherewithal to gobble up many of those customers, including two of the most nefarious: Charles H. Keating's Lincoln Savings & Loan Assn. in Irvine, Calif., and Miami-based CenTrust Savings, which made David L. Paul infamous.

HARDY TIMES. At a time when most S&Ls are either dying or limping badly, Montgomery is improbably yet rapidly fashioning a national empire. Since mid-1990, Great Western has swung nine separate deals, adding more than \$12 billion in new deposits (table). The thrift, with \$39.6 billion in assets, is now the largest in both California and Florida. Although his company is hardly free of loan problems, Montgomery is already working on his next and perhaps biggest deal: Great Western is one of 13 financial

GREAT WESTERN'S BUYING BINGE

Thrift/Date	Cost/Millions
CENTRUST SAVINGS Miami/July, 1990	\$86.0
CITY SAVINGS Palm Beach, Fla./ September, 1990	9.8
CARTERET SAVINGS BANK* Morristown, N.J./ October, 1990	28.0
LINCOLN SAVINGS Irvine, Calif./ March, 1991	12.1
PIONEER FEDERAL SAVINGS Clearwater, Fla./March, 1991	5.2
THE FIRST Orlando/October, 1991	23.4
AMERIFIRST FEDERAL SAVINGS Miami/March, 1992	27.5

*13 Florida branches

DATA: COMPANY REPORTS



MONTGOMERY: HOMEFED IS TEMPTING, BUT "WE DON'T INTEND TO GET INTO A BIDDING WAR"

institutions that have lined up for a peek at the books of HomeFed Bank. The ailing San Diego thrift is sagging under the weight of more than \$2.1 billion in bad loans but boasts 201 branches.

It all sounds pretty flashy for a one-time UCLA volleyball player who started his business career as an accountant with Price Waterhouse. In fact, Montgomery, who has been chief executive since 1979, is continuing to display the same cautious approach that enabled him to sidestep the manias of the 1980s. Typically, Montgomery buys the branches and their deposits, then sells off riskier loans. In the case of failed thrifts, he fobs off all the bad loans on the federal Resolution Trust Corp., which is in charge of the S&L bailout.

FULL SPECTRUM. What's more, with many banks and thrifts unable to afford big acquisitions, Montgomery has found bailouts to be a buyers' market. Consider CenTrust Savings. Montgomery's initial \$100 million bid for the Miami thrift was rejected by the RTC in 1989 as too low. But when more generous offers failed to materialize, Great Western's CEO ended up winning CenTrust the following year, even after reducing his bid to \$86 million.

Even with a crowded field of potential

buyers eyeing HomeFed, Montgomery has no intention of changing his deliberate style. California's two banking behemoths, Wells Fargo & Co. and BankAmerica Corp., are said to be among Great Western's competition. "We don't intend to get into a bidding war," says the 57-year-old Montgomery, an Old West aficionado whose office is decorated with Indian art and cowboy paintings.

Still, that doesn't mean that growth isn't crucial to Montgomery. He isn't content to make Great Western a mere purveyor of home mortgages, like most thrifts. He is out to build a nationwide consumer franchise, more akin to a commercial bank. And he has a head start. For more than 60 years, Great Western has owned a consumer finance subsidiary that now has 512 offices, mostly in the Southeast. During the 1980s, Montgomery broadened Great Western's

Great Western now has more than 1,000 offices.

Unfortunately, business hasn't kept pace with growth

reach by opening 190 mortgage offices in 21 states. His recent acquisitions will be a key component of what he hopes will be an extensive network that will offer everything from home mortgages to credit cards. He plans, for instance, to introduce new customers to Great Western's small but growing securities business, which offers stocks and bonds as well as 11 of its own mutual funds.

For now, Montgomery's target markets are California and Florida, which he sees as America's two growth states. He also has a small foothold in Washington State and a single branch in Arizona. "We're not giving up on Texas and a few other places, either," he says, though he says he hasn't found anything yet in the Lone Star State.

TROUBLES AHEAD. Despite his careful empire-building, Montgomery has run into several snags. For one thing, operating costs have soared. Great Western now has more than 1,000 branches and consumer credit offices in 31 states, with a total of 14,700 employees. But there has been little demand for consumer loans during the recession. As a result, overhead is up 32% since 1989, while assets have risen by only 6.4%.

Despite Great Western's policy of selling off acquirers' bad loans, its own loan portfolio has had plenty of problems, stemming from the sluggish California economy. Nonperforming loans, mostly home mortgages, rose 30% in the first quarter, to \$1.8 billion. The loan problems pale next to other California thrifts. But Great Western was forced to add \$107 million to its reserves for bad loans. Excluding an accounting gain, the thrift's first-quarter profits fell 37%.

Montgomery argues that such setbacks will be short-lived. With the economy expected to strengthen in the second half, he believes the worst of Great Western's loan problems are over. Moreover, he expects consumer borrowing activity to pick up. "With the deposit base we've built, we're in great shape when the economy rebounds," he says.

Banking on an economic upturn may seem a little risky. That's one reason Great Western's stock still trades at 17¼—or eight times earnings—compared with more highly regarded banks that trade at a price-earnings multiple of 10 and above. "I call them survivors, not yet thrivers," says analyst Joseph A. Jolson of Montgomery Securities Inc.

To Jim Montgomery, that may or not necessarily be an insult. At a time when most of Michael Milken's thrive-at-any-cost S&L clients are insolvent or closing, survival suits him just fine. And if the economy does kick in, he may end up gloating again.

By Ronald Grover in Los Angeles

BEST UNIX SERVER **PRICE-PERFORMANCE**

1. Sun SPARCserver 690MP
\$8,854 per tps-A 95.41 tps-A
2. Bull DPX/2 384
\$9,902 per tps-A 63.85 tps-A
3. Data General AViiON 5225
\$11,498 per tps-A 50.80 tps-A
4. HP 9000 Series 817S
\$11,830 per tps-A 51.20 tps-A
5. IBM RS6000/560
\$12,671 per tps-A 72.00 tps-A
6. AT&T/NCR StarServer E
\$14,520 per tps-A 24.84 tps-A
7. Sequent Symmetry S2000/700
\$14,662 per tps-A 168.91 tps-A
8. Unisys U6000/55
\$21,700 per tps-A 9.99 tps-A

On March 6, 1992 the Transaction Processing Performance Council published TPC-A benchmarks for 38 UNIX servers. This list represents each vendor's best price-performance server.

Our new server has created something of a cult. We already have 37 followers.

Even though our new multiprocessor servers have been around only a few months, they've attracted quite a following.

Take these recent database performance benchmarks, for instance*. The Sun™ SPARCserver™ 690MP delivered the best price-performance among 38 UNIX servers. Not bad, considering those servers included the best of IBM, Hewlett-Packard, Unisys, Sequent, and others.

Our SPARCserver systems have attracted a following in other quarters, too.

The leading database vendors seem to like them — Informix, Ingres, Oracle, Software A.G. and Sybase all have products shipping today.

And then there are the database users. It's hard to say what they value most in a SPARCserver system: the affordable power, the ability to support hundreds of people, or the upgradeable CPU modules that ensure a cost-effective growth path to next-generation technologies.

But this much we do know: Companies like yours snatched up a record 2,600 new SPARCserver systems in the first 60 days.

To learn more about the UNIX server that leads all others in database price-performance, call 1-800-426-5321 ext. 470 for a Database Performance Brief. We'll even include the TPC-A results for the 37 other servers tested.

That way, you can learn something about the followers, too.

 **Sun Microsystems**
Computer Corporation



*The SPARCserver 690MP (left)
is one of a family of powerful,
affordable multiprocessor servers.*

*Published by the Transaction Processing Performance Council, Benchmark A, March 6, 1992. Benchmarks achieved running Sybase SQL Server 4.8 software. © 1992 Sun Microsystems, Inc. Sun, Sun Microsystems and the Sun Logo are trademarks or registered trademarks of Sun Microsystems, Inc. All SPARC trademarks, including the SCD Compliant Logo, are trademarks or registered trademarks of SPARC International, Inc. SPARCserver is licensed exclusively to Sun Microsystems, Inc. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. All other product or service names mentioned herein are trademarks of their respective owners.

BY JEFFREY M. LADERMAN

THIS SPIN-OFF MAY BE A 'SCREAMING BUY'

Corporate spin-offs are the orphans of Wall Street. Take GFC Financial, recently spun off to stockholders of parent Dial. The new stock, which trades on the Big Board, climbed as high as 23 but has since fallen to 19%. Much of the selling has come from index funds that must own Dial because it is part of the Standard & Poor's 500 but can't own GFC because it's not part of the index. Even the announcement of strong first-quarter profits, up 42%, failed to stem the selling pressure.

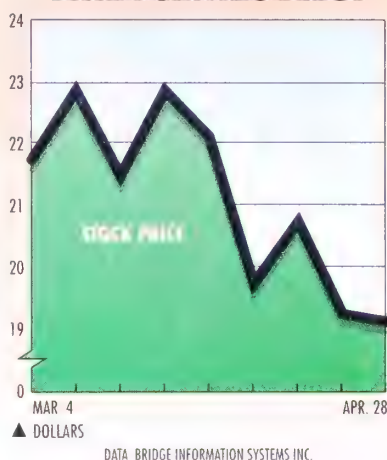
But to some market pros, the indiscriminate dumping has created a tempting investment opportunity. Part of the market's reticence over GFC stock is wariness about finance companies. "The market is unfairly punishing GFC for the industry that it's in," says Scott L. Greiper of *The Spinoff Report*. "The stock is a screaming buy."

Greiper says GFC is a different animal from most large finance companies. The bulk of its business comes from making secured loans of \$2 million to \$30 million to "middle-market" companies. Asset quality is high. Samuel L. Eichenfield, GFC's chairman and CEO, says that troubled assets are below 4% and that loan losses are under 0.3%. Prior to the spin-off, Dial took write-downs to clean up the books and give the new company a fresh start.

GROWTH POTENTIAL. Eichenfield says the spin-off opens up new opportunities. Under Dial, a consumer-products company, growth was constrained to about 8% a year because it had to pay about half its profits to the parent. Now GFC has more flexibility. It can use its own stock, for instance, to make acquisitions. Eichenfield wants to acquire a finance company that specializes in "working-capital" loans—money to finance inventory and receivables. That would allow GFC to offer a wider range of services.

Eichenfield says the company may allow its Verex Assurance unit—an insurer of residential mortgages—to start writing new policies again. That unit has been contracting for several years when Dial halted new business after a spate of losses. GFC also inherited from Dial a London-based European finance company, which may be sold.

GFC FINANCIAL'S DISAPPOINTING DEBUT



That could free up about \$100 million to reinvest at home.

Analyst Jay R. Leopold of Legg Mason Wood Walker forecasts profits of \$2.40 a share for 1992 and \$2.80 for 1993. The dividend, which is expected to be set at 56¢ a share, would provide a 3% yield. By Leopold's estimates, GFC should climb into the low 30s in the next 12 months.

SAATCHI: IT'S STILL CREATING SPARKS

Big multibillion-dollar public pension funds don't usually buy penny stocks. But the \$20 billion State of Wisconsin Investment Board is the largest shareholder of Saatchi & Saatchi PLC, the British-based global advertising giant. The pension fund accumulated some 8.2% of the company over the past 15 months. Saatchi American depository receipts trade on the Big Board for \$1.13.

The ADRs were as high as 34 five years ago when brothers Maurice and Charles Saatchi were on their worldwide acquisition binge. But the Saatchis' fortunes started to slide in the late 1980s when they tried to diversify into management consulting. That, coupled with heavy debt and recession in the U.S. and Britain, left the company with huge losses. A year ago, Saatchi recapitalized, alleviating some of the debt burden but increasing the number of shares nearly tenfold, to 1.5 billion. Each ADR is backed by three ordinary shares.

David Herro, an international portfolio manager on the Wisconsin board, says Saatchi's restructuring—including

shedding about one-third of the workforce—puts the company in a good position to profit from economic recoveries in the U.S. and Britain. He says few people expect Saatchi to make money over the next year, so even a tiny profit will catch investors by surprise. Herro is projecting only an \$18 million increase in revenues for 1992 to \$1.35 billion. But the cost-cutting, he thinks, could help the company boost its aftertax profit margin from 6% to 7% and allow the company to earn about 5¢ per ADR.

Despite its woes, Saatchi hasn't lost its creative spark. "It's still a great brand name in the global advertising industry," says Adrian Day of the investment newsletter that bears his name. Another plus is the Conservatives' victory in the recent British elections. Saatchi was the Tories' main agency, and the win could lead to more government work.

Though Wisconsin is the largest holder, some other institutions have taken big stakes. Fidelity Investments holds 3.1%; Boston money-manager Grantham Mayo Van Otterloo, which follows a contrarian investment strategy, has 3.2%.

BUY ONE, GET ONE FREE

Want a cement company for free? Buy Texas Industries, which trades on the Big Board at 21. Texas Industries owns a cement company and 80.7% of Chaparral Steel. There are 2.2 shares of Chaparral Steel behind each share of the parent. At a recent price of 10%, that means Texas Industries' steel holding are worth \$23.38 a share. The market puts no value on the cement operation.

Analyst William V. Stephens of Rauscher Pierce Refsnes in Dallas says that won't last. Stephens thinks the pickup in the Texas economy will put upward pressure on cement prices, and he's expecting a 25% increase over the next 12 months, nearly all of which will drop directly to the bottom line.

Chaparral is no slouch, either. It's one of the low-cost producers in structural steel that has been wooing clients from big steel companies for years, and it stayed profitable through the recession. Texas Industries' fiscal year ends in May, and Stephens thinks it will earn only 9¢ a share. But he's forecasting \$1.68 for fiscal 1993 and a huge \$4.80 in fiscal 1994. He says the stock could double in the next two years.



TECHNICAL KNOCKOUTS!

THE PITCHES
COME FROM
ALL TYPES

the report, but a spokesman says the company would consider mail order: "We want to be where the customer buys," he says.

So do most of IBM's competitors. Industry analysts say Compaq Computer Corp. is almost certain to get into direct marketing, although a spokesman will say only that the company is "seriously studying" the move. They also expect Apple Computer Inc. to go the direct-mail route—at least for its low-end Macintoshes. But nothing will happen soon, says a spokeswoman: "Down the road, it's

COMPUTERS

COMPUTERS BY MAIL: A MEGABYTE BUSINESS BOOM

Even the majors are barging into lucrative direct marketing

Mike Mikus, network manager for Denver-based environmental consulting firm Woodward-Clyde Consultants, was in a hurry. He needed a dozen PCs—and in Alaska, no time to help cope with the Exxon Valdez disaster. There were no dealers near the oil spill, and the major PC maker couldn't figure out how to get machines to the site quickly. So he got on the phone to Northgate Computer Systems and ordered the hardware. It arrived in four days.

That was three years ago, and not many companies back then would buy sight unseen through the mail. But now, large companies, including Pfizer, with Corona, General Motors, Time Warner, Amoco, Lockheed, and Occidental Petroleum routinely use direct mail to get personal computers quickly and at rock-bottom prices.

BIVALENT FEELINGS. As a result, direct-mail computer sales are booming. While most U.S. PC makers faced stagnant revenue growth last year, shipments by direct-mail marketers jumped 40%, estimates WorkGroup Technologies Inc., a market researcher. By 1995, says WorkGroup President John O. Dunkle, 60% of all PCs sold in the U.S.—or about 18 million out of 30 million—will be via direct mail (chart). The leader of the direct-marketing movement, Dell Computer Corp. in Austin, Tex., racked up a 63% sales gain, to \$890 million for its fiscal

year ended Feb. 2. And Gateway, which edged out Dell in unit shipments in the U.S., expects to break \$1 billion in revenues this year (page 96).

No wonder the computer industry's biggest names are considering mail order. IBM is already selling PCs through catalogs in Europe and uses a telephone-sales operation to push OS/2, its personal-computer operating system. It also has a toll-free customer help-line in Atlanta that analysts say could become the nerve center of a direct-marketing operation for PCs. In late April, sources close to IBM confirmed reports in *PC Week* that the company is negotiating to buy all or part of Northgate, a struggling direct marketer of PC clones in Eden Prairie, Minn. IBM declines to confirm or deny

something we might look at."

The major players are clearly ambivalent about direct marketing—and for good reason. "It's short-term and opportunistic," says Michael Morand, vice-president for marketing at AST Research Inc. "Anyone can get an 800 number and put a catalog together." AST and other leading brands fret about mail order tarnishing their images. Worse, they fear offending the dealers they have depended on to sell their products for a decade.

IDLE HOURS. The dealer channel worked well in the 1980s. But with the contraction of the PC market and the recession, IBM and Compaq have been forced to slash prices, squeezing dealer profits. Even so, the major brands continued to lose sales to mail-order houses and to clones that sell through mass merchandisers and so-called superstores, giant warehouse outlets. "Guys in stores are twiddling their thumbs waiting for customers," says Michael S. Dell, CEO of Dell Computer. "Our salespeople handle an average of 40 to 60 calls a day."

The toughest obstacle in direct marketing for the big suppliers is the economics. Even after cutbacks, IBM and Compaq have relatively high overhead. Also, they are geared up to sell huge runs of a few standard configurations, while mail-order houses generally build to order. "For shipping onesies and twosies with different configurations across the country, the big companies will need to establish an entirely different organization," says Seymour Merrin, president of market researcher Merrin Information Services Inc.

Still, the big guys have little choice. Now, all but the most exotic PCs are seen as commodities, and "the educated user doesn't need that much support," says Richard Zwetckhenbaum, senior analyst at market researcher International Data Corp. Many large companies service their own PCs and don't need



ILLUSTRATION BY RAY VELLA/BW



Buckle up — together we can save lives.

THE SEQUEL THAT IMPROVES ON THE ORIGINAL.



NEW TAURUS

You've been waiting for it. The evolution of the revolutionary Ford Taurus. Be prepared to cast aside the limits of traditional sedan expectations.

THE REINTRODUCTION.

And here it is. The 1992 Ford Taurus. An innovative wonder that gives refinement and subtlety their due. The new Taurus has a completely redesigned exterior that gives you a distinct new edge of sophistication. The interior is quieter, more comfortable. And the instrument panel flows smoothly from door to door, with controls put in places that will pleasantly surprise you.

THE SAFETY STORY.

But this Taurus is not just a testament to smoothing rough edges. It's taking the best of new ideas and putting them to use. Anti-lock brakes are available. And Taurus offers *dual air bags* (standard driver and optional right-front passenger air bag supplemental restraint system to be used with your safety belts) — a Ford Motor Company exclusive in this class.



THE SATISFYING CONCLUSION.

The 1992 Ford Taurus. An excellent reminder that the best sequels are the ones that know why the original was a success.

HAVE YOU DRIVEN A FORD LATELY?



dealers, but they turn to mail order for what they do need: low prices and quick delivery. For small customers, Dell says, 93% of service problems are handled by calls to its 24-hour support line. Most top mail-order brands have such lines and offer on-site service, too.

QUICK EXIT. Some established PC makers have already dabbled in direct marketing—with mixed results. Wang Laboratories Inc. entered the mail-order business in February, 1990, but quickly backed off when mail-order sales began to steal customers from its sales force. Digital Equipment Corp., the \$14 billion minicomputer maker, now aggressively pushes PCs through the mail for half the price it sells them through its regular channels. Even so, Merrin says, customers report that DEC's prices are too high

BEFORE YOU BUY: A MAIL-ORDER PRIMER

DO YOUR HOMEWORK Read product reviews in computer magazines. You can also check with user groups in your area to find out about reliability and after-sales support and service

WHAT HAPPENS IF IT BREAKS? Most suppliers offer a one-year warranty that includes replacing defective parts. Some offer 30- or 60-day money-back guarantees. Toll-free customer hot line is essential. Look for one that won't keep you on hold for hours

GET IT IN WRITING Once you've decided on a model, make sure you're getting what's advertised. When ordering, outline exactly which components you expect

DATA BW

to compete with Dell's or Gateway's. Still, DEC says that catalog sales now account for 80% of its PC sales, up from just 20% a year ago, helping double U. S. PC revenues this year, to \$350 million.

In a market where growth is hard to come by, such results are hard to ignore.

"Any vendor who does not consider mail order is cutting off one-third of the market," says WorkGroup's Dunkle. So get ready for 1-800-BIG-BLUE.

By Sunita Wadekar Bhargava in New York, with Stephanie Anderson Forest Dallas and bureau reports

GATEWAY IS SWINGING—AT A DIZZIFYING SPEED

If and when computer industry heavyweights jump into mail order, they'll have a tough time matching the prices of Gateway 2000 Inc. Ted Waitt, Gateway's 29-year-old, pony-tailed president, has given new meaning to the idea of low overhead. Working for an average wage of about \$7 an hour plus a share of profits, Gateway's former meatpackers hand-assemble personal computers in a corrugated-metal building in North Sioux City, S. D., abutting a gravel-covered parking lot. A similar one-story structure serves as the headquarters. Waitt's idea of an executive lunch is a bite at the local truck stop.

But low overhead has made possible the low prices—often 10% to 20% less than those offered by dealers—that have pushed Gateway to the top of the booming \$4.6 billion U. S. mail-order computer business. Last year, Gateway surged past Dell Computer Corp., the longtime mail-order leader, to ship more than 250,000 PC clones in distinctive black-and-white boxes—inspired by the Holsteins of the Waitt family cattle business. Revenue for privately held Gateway more than doubled, to \$627 million, and pretax earnings spurted 137%, to \$59.7 million, Waitt says. Despite vicious price competition, he adds, pretax margins widened to 9.4% from 9.1% in 1990. This year is off to a flying start: Although Waitt won't disclose first-quarter earnings, he says sales jumped 97%, to \$237 million.

Not bad for a shoestring startup. In 1985, a year after dropping out of the University of Iowa to work in a computer store, Waitt teamed up with a friend to sell by mail hard-to-get parts for a discontinued line of Texas Instruments Inc. desktop computers. He borrowed \$10,000 from his grandmother and set up shop in a deserted barn on the family farm. In 1987, Waitt and co-founder Michael Hammond switched to selling their own low-cost IBM PC clones.

Life at the top is tough for Gateway, however. Dell "definitely wants to take back" the top U. S. spot, says CEO Michael S. Dell, who just cut some prices by an average of 17%.

LATE DELIVERIES. But Gateway's biggest challenge, says Waitt, is from within: Rapid growth is taking its toll. Gateway has struggled just to train enough employees—there are 1,400 now—to handle the flood of orders. By winter, some deliveries were taking six weeks instead of two, and quality suffered badly. "The company has grown

so fast that its systems have not caught up," says Thomas Walsh, executive director for Houston law firm Mayor, Day, Caldwell & Keaton. Major Day ordered 50 Gateways early this year. But 3 wouldn't work out of the box, and 14 monitors and 10 more computers soon failed.

Gateway is moving quickly to overcome its growing pains. In February, it hired several managers from Compaq Computer Corp., including one in the new job of quality assurance director and removed four of its own. Gateway also worked with suppliers to redesign the main circuit board of one PC. The improved reliability and helped persuade Walsh to buy several dozen Gateways in March. He says he has discovered few bugs so far.

Gateway will have to do better than that to reach Waitt's goal of \$1 billion in sales this year. It must boost sales to large companies, which buy computers in bulk but demand better service than the small firms and individuals who now account for 55% of Gateway sales. "You can get business with price," says Waitt, "but you have to have service to keep it." So he is working with major customers, including Microsoft Corp., which has bought more than 500 Gateways, to improve service. One innovation: Major buyers soon will place orders and check them electronically. And rather than build computers to order, Gateway says it may stockpile inventory for customers to speed shipments.

But even as Gateway caters more corporate customers, Waitt plans to stick with his tightfisted success formula, save for one minor indulgence: He may pave the parking lot.

By Lois Therrien in North Sioux City, S. D.



WAITT: \$1 BILLION IN SALES THIS YEAR?

**INTRODUCING THE
PALM PHONE.
THE ULTRA-THIN
CELLULAR FROM
PANASONIC.**

Panasonic introduces the **Palm Phone™ Cellular Phone.** It will keep you in touch with the world from the palm of your hand.

Introducing a cellular phone that can stay by your side through thick and thin. It's easy to carry and easy to use. The new Palm Phone from Panasonic.

While the Palm Phone may be less than a handful, you can say more than a mouthful about its unique design and sophisticated features. The Palm Phone folds up to take up hardly any room. Folded it's less than one inch thick. And just under 10 ounces. Yet despite its small size, it has an extra large backlit ELD (Electronic Luminescent Display) screen. Its alpha-numeric memory can store 200 numbers. And its rechargeable battery lets you talk for a long time—up to 55 minutes.

So, if you're looking for an ultra-thin cellular phone, hold out for the one that fits in the palm of your hand. To speak to the Panasonic Palm Phone dealer nearest you, call **1-800-365-1515, ext. 444.** ■



Panasonic®
just slightly ahead of our time.®

\$2,295 | **\$1,495**
25-MHz | **20-MHz**
i486SX | **i486SX**
12 | **Small**
Drive Bays | **Footprint**
4-MB 32-bit
Upgradeable
to 50-MHz
i486DX2™

LIMITED TIME OFFER

MS-DOS™ 5.0 & Windows™ 3.1 included on all Flyer 32LCT and Flyer 32DT hard drive models.



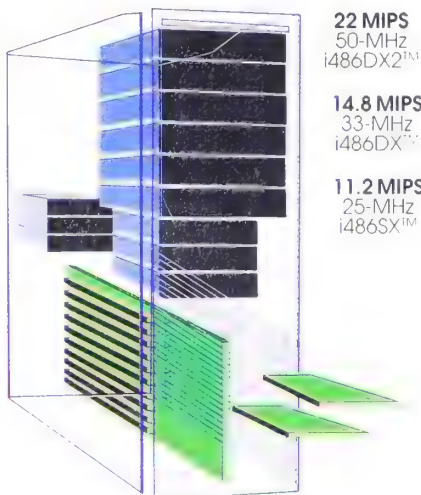
Did Your Last Relationship End

Introducing the ALR Flyer 32LCT

The **Flyer 32LCT** gives you the expandability you'd expect to find in a full-featured tower system at the type of price you'd expect to pay for a desktop PC.

Starting at.. **\$2,295**

With **twelve drive bays**, **ten industry standard expansion slots**, built-in



22 MIPS
50-MHz
i486DX2™

14.8 MIPS
33-MHz
i486DX™

11.2 MIPS
25-MHz
i486SX™

Super VGA graphics, and room for 64-MB of RAM, it's the perfect system for growing networks or expansion hungry single users.

The Flyer 32LCT can even keep pace with your changing power requirements. When you outgrow the Flyer 32LCT's current processor you simply plug in a more



\$995
25-MHz
i386SX™
Upgradeable
60-MB Disk
Super VGA
PowerFlex Flyer

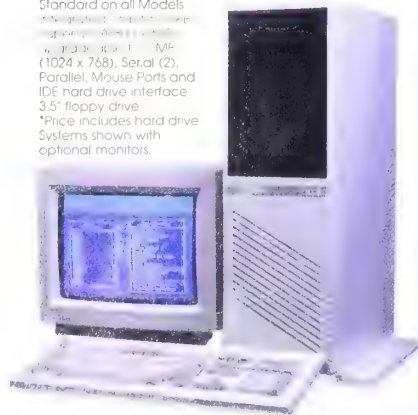
Sure, the two of you got along fine in the beginning. Then your needs changed, you wanted more... and before you knew it, you'd completely outgrown your old PC. Well, don't be discouraged, because now there's a system that won't cramp your style.

Because You Needed More Space?

powerful one. ALRs
Just Upgrade the CPU"
 technology, makes upgrading
 easy and affordable.

Model	PowerFlex FLYER	Flyer 32 DT	Flyer 32 LCT
Options	i386SX/25	i486SX/20	i486SX/25
Upgrades to	i486SX/20	i486SX/25	i486DX/33
		i486DX/33	i486DX2/50
Memory Arch	16-bit	32-bit	32-bit
Standard RAM	1-MB	4-MB	4- or 8-MB
Maximum RAM	16-MB	64-MB	64-MB
Memory Cache	8-KB int.	8-KB int.	8-KB int.
	(i486SX only)		
Optional Cache		256-KB	256-KB
		(Std. on DX2/50 Models)	
Expansion Slots	3 ISA	3 ISA	10 ISA
Standard HDrive	60/80-MB	0/80/120/200-MB	0/120/340/535-MB
Drive Bays	3	3	12
Starting Price	\$995*	\$1,495	\$2,295
25-MHz 486DX2		\$2,495	\$3,595

Standard on all Models
 1024 x 768, Serial (2),
 Parallel, Mouse Ports and
 IDE hard drive interface
 3.5" floppy drive
 *Price includes hard drive
 Systems shown with
 optional monitors.



Available at these nationwide locations:



Introducing The Flyer 32DT

The Flyer Family also consists of some very powerful, upgradeable and economical desktop systems.

The PowerFlex FLYER and Flyer 32DT...

The Flyer Family also offers two complete multimedia workstations. The Flyer MPC and the FLYER 32 MPC... Prices start at just \$2,795



For the start of a great, more open, relationship. Visit your favorite ALR reseller, or call:
1-800-444-4ALR

ALR

Irvine, CA 92718
 TEL: (714) 581-6770
 Advanced Logic Research, Inc. FAX: (714) 581-9240



ABSOLUT STANDARD.

FOR GIFT DELIVERY OF ABSOLUT® VODKA (EXCEPT WHERE PROHIBITED BY LAW) CALL 1-800-CHEER-UP.
PRODUCT OF SWEDEN. 40 AND 50% ALC/VOL (80 AND 100 PROOF). 100% GRAIN NEUTRAL SPIRITS. ©1993 CARILLON IMPORTERS, LTD., TEANECK, NJ.

Developments to Watch

EDITED BY FLEUR TEMPLETON

HIS GLASS IS SO SMART, IT CAN PLAY 'NAME THAT CHEMICAL'



Researchers at the University of California at Los Angeles have developed a high-tech version of tinted glass. Called "smart glass," it changes color in the presence of certain chemicals. That could make it useful for environmental monitoring or as a diagnostic tool in medicine.

The UCLA scientists start with a glassmaking

process, then add highly selective enzymes or proteins that change color in the presence of particular chemicals. As the reaction sets, spaghetti-like strands of glass grow and surround the large proteins, says Bruce S. Dunn, a materials scientist at UCLA. The finished glass is porous enough to let in all gas molecules such as oxygen and carbon monoxide. These react with the protein, causing the color change. Dunn says that eventually the smart glass could be used to monitor gases in the atmosphere. And if made into optical fibers, it could detect levels of gases in the bloodstream.

THE VISIBLE HAND MAKING GERMANY HIGH-TECH HEAVY HITTER

Ever since George Bush became President, Washington has debated whether Uncle Sam should support commercial research and development directly. Many industry groups and economists say yes; the Bush Administration says no. Now comes a report from the industry-funded Council on Competitiveness that adds more fuel to the fire by linking much of many's technological prowess to its industrial policy.

The report points out that Germany leads the world in many technological categories. In 1990, it exported nearly 30% more manufactured goods than did either the U.S. or Japan. The reasons, the report says, include industrial cooperatives, which help companies solve problems and acquire new manufacturing technologies, and research institutes that do R&D for industry and train students to solve real-world problems.

The German government also devotes a higher percentage of its R&D funds to commercial technologies than does the U.S., says Daniel F. Burton Jr., the council's executive vice-president. "The No. 1 lesson is that industrial innovation is a clear and specific goal of German government policy," he says.

NOW, BUCKYBALLS MAY BE USED TO FILTER AND TRAP GASES

Buckyballs continue to tantalize scientists. The sphere-shaped molecules of carbon, so named because their structure resembles Buckminster Fuller's geodesic domes, already have been shown to act as superconductors, catalysts, and templates for making diamond films. Now, there's a new set of potential uses: purifying and storing gases.

It all began when chemist Roger A. Assink and colleagues

at Sandia National Laboratories were analyzing a sample of buckyballs. Unexpectedly, they found the material contained gases such as nitrogen. Analysis revealed that small gas molecules slip in and out of the spaces between buckyballs.

The discovery suggests two potential uses: Clumps of buckyballs could store gases such as oxygen. And a thin layer of buckyballs could remove nitrogen and other contaminants from natural gas, a key purification process that normally takes several steps. Nitrogen and oxygen would pass through the layer, leaving behind the larger molecules of pure methane, which are too big to slip into gaps. The Sandia team is now working to make such buckyball filters.

CLICK TO WATCH, OR EVEN TAPE: CAN TV GET ANY SIMPLER?

The couch-potato life keeps getting easier and easier. First to go was manual programming for the videocassette recorder—a daunting chore for many viewers. That's why Gemstar Development Corp.'s VCR Plus was an instant hit in late 1990. Just tap in the code that newspapers print next to programs in TV listings, and VCR Plus handles the rest.

Now, engineers want to make it simpler to tune in your favorite shows—by putting a program guide in your set or cable-TV box. Push a button on a new remote control, and a menu pops onto the screen with a listing of local stations or one for types of programs, such as news, sports, and movies. Move an on-screen pointer to a program or station, and the TV would automatically tune it in. Or, to tape a future program, just point to it, and the system takes care of that, too.

PRS Corp., Hong Kong, which pioneered a similar scheme for radios called ID Logic, is now peddling ID TV Logic to the video industry. InSight Telecast Inc. in Fremont, Calif., is already testing its version in several cities, with a nationwide rollout expected soon. Zenith Electronics Corp. has just agreed to build InSight's technology into its TVs, VCRs, and cable boxes.

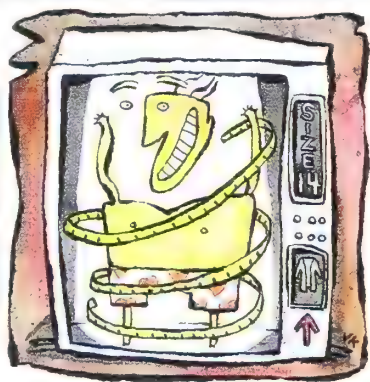
'MY TAILOR? KIND OF A BY-THE-NUMBERS TYPE—BUT GOOD'

Suits that are made to measure could move out of the luxury boutique and into the mall if a New York City company has its way. Dimensional Measurement Systems Inc. is commercializing a measurement technology that could offer lower-priced custom-tailored clothing in hours.

To start, white light is projected onto a subject from three directions.

Digital cameras capture images from various angles, and a computer processes these inputs to get three-dimensional contours of the body. These measurements are sent to a computer-aided design (CAD) pattern maker, made by Microdynamics Inc. in Dallas, that modifies standard patterns for individual measurements. The CAD data are downloaded to an automatic fabric cutter, and the garment is sewn by a worker.

Prototype systems will be tested at a major retail chain later this year, says DMS President Peter M. Kuhlmann. He says the technique could also be used in place of plaster foot casts when doctors fashion corrective foot supports.



YOU THOUGHT GERRY TSAI WAS RETIRED? SO DID HE

But the lure of a solid little insurer was too much for the dealmaker

It's a familiar scene: Gerry Tsai, framed dramatically by a panoramic view of Manhattan's skyline, is waving a packet of financial data like a magic wand and predicting big things. "I thought I was retired," he says. "But now, I'm officially back in business."

The business is Delta Life Corp., a small, closely held insurance holding company in Memphis whose principal unit specializes in annuities. In March, Tsai led a group of investors that collectively purchased 48% of Delta Life for \$26.8 million. His hunch: that financial woes and bankruptcies among larger insurers will cause a flight toward safer, untainted companies such as Delta Life. About 75% of its \$751 million in assets is invested in U.S. government securities, and it has few bad loans. By offering safety in a time of turmoil, "we will grow at least 20% a year," Tsai forecasts.

So begins the next chapter in the roller-coaster saga of Gerald Tsai Jr.—the hyperaggressive moneyman who spurred the "go-go '60s" on Wall Street and who has alternately wowed and frustrated American business ever since (table). Once hailed as the Street's Most Likely to Succeed, Tsai has often promised more than he could deliver. The result is an odd reputation as both legend and letdown.

'IN THE HUNT.' Three years ago, his reputation—if not his wallet—took a beating when he departed unceremoniously as chairman of Primerica Corp. Now 63, Tsai is counting on Delta Life to put him back on the fast track. Says buddy E. John Rosenwald Jr., senior managing director for corporate finance at Bear,

Stearns & Co. and part of the group that purchased Delta Life: "Gerry's back in the hunt and raring to go."

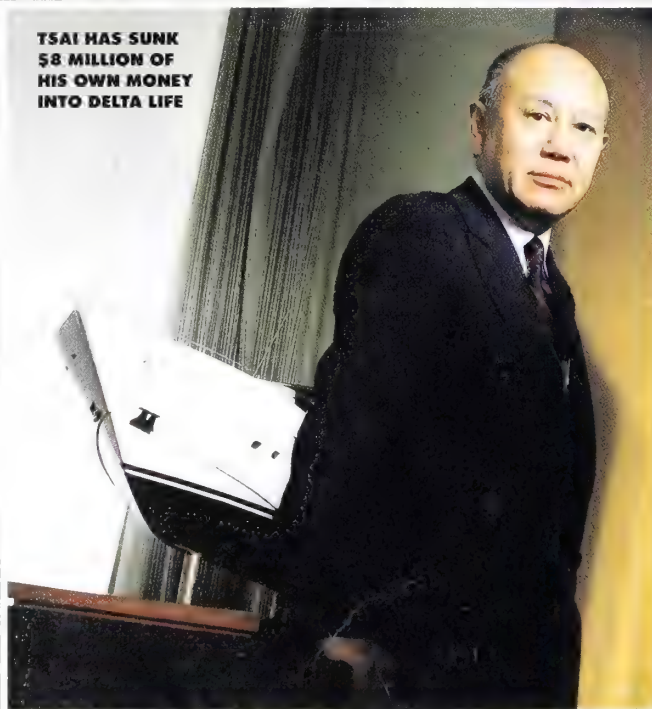
The affable Chinese immigrant certainly radiates brash self-confidence. He has grown his hair ponytail length ("It's my way of rebelling") and built a palatial house in Palm Beach, Fla., that includes two bowling alleys ("I entertain a lot"). He bats away notions that he should become a spokesman for his race ("Seriously, what do I have in common with the people in Chinatown?"), and despite his high-rolling lifestyle, he remains an intensely private person

that Gerry Tsai has the unique ability to buy cheap, sell high, and pass on problems to other people."

Others, such as longtime friend Sherry Young, a marketing vice-president at General Motors Corp., defend Tsai as visionary "who knows how to spot opportunities that others can't and has a keen sense of when to get out." Tsai himself believes he has built value in his ventures and makes no apologies for his up-and-down career. "If I were going to live my life again," he says, "I would do it exactly the same."

NEW BREED. Born in Shanghai, Tsai has been controversial ever since he joined Fidelity Investments in the 1950s as a junior stock analyst fresh out of Boston University. Tsai wowed Wall Street with an unprecedented method of picking speculative stocks for short-term appreciation and selling them the moment their growth slowed. The method shocked up the conservative money-management Establishment and inspired a whole new breed of portfolio manager. By 1968, Tsai had quit Fidelity to launch the Ma-

TSAI HAS SUNK \$8 MILLION OF HIS OWN MONEY INTO DELTA LIFE



TSAI'S WILD RIDE

1958 At Fidelity, Tsai helps revolutionize money management with an ultra-aggressive trading style

1966 As the 'go-go '60s' godfather, he starts the Manhattan Fund. Sells it to CNA for \$27 million in 1968 and when market plunges, so does the fund

1978 Buys insurer Associated Madison Tacks on several acquisitions, and sells to American Can for \$162 million in 1982

1982 Leads American Can's charge into financial services and is named CEO in 1986. Renames company Primerica and eventually buys Smith Barney

1989 Acquisitions load Primerica with debt, forcing Tsai to sell the company for half 1987's peak market value

1992 Tsai leads purchase of 48% of Delta Life for \$26.8 million

DATA BW

("Let's just say Donald Trump and I have different ideas about publicity").

Some Tsai-watchers, however, say that the financier's gains have come largely at the expense of others. Benjamin F. Ward, a Delta Life co-founder who left the company two years ago but retains an interest, was worried about Tsai's plans. "Tsai has been up, down, and around, but he has never lost any of his own money," Ward says. Grumbles another Tsai observer: "Let's just say

hattan Fund, which he seeded by raising a then-unheard-of \$247 million.

The market turned in 1969, however, exposing the risks of Tsai's approach. The once-hot Manhattan Fund was pummeled, as more than half of its 45 stocks lost 90% of their value. Tsai emerged untouched, though. He had bailed out a year earlier, when he sold the fund to insurance giant CNA Financial Corp. for a cool \$27 million.

Tsai resurfaced in 1978, when he



Just when you thought there was only one way to own your own car, GMAC introduces SMARTBUY

It used to be that when you wanted to own a new car or truck, conventional financing was the route to take. It still is for many buyers.

But now, there's a new, alternate route to ownership. It's called GMAC SMARTBUY.SM

SMARTBUY is a new purchase plan* that, like conventional financing, gives you ownership of your GM car or truck. What's different about SMARTBUY is the low regular monthly payments and the choices you have when your contract ends. You can make a final SMARTBUY payment, which is larger than your regular monthly payment. You can refinance. Or you can return

the vehicle to the dealer.† It's up to you.

Now, is it right for you? If you want to own your own car *and* drive a new vehicle every few years, chances are it is. So see your GM dealer for details about SMARTBUY. And take a new route to ownership.

*SMARTBUY is not available in Nevada. Available with modifications in Maryland, North Carolina, New Jersey, Pennsylvania and Washington, D.C. Limited availability in Arkansas. †If vehicle is returned to dealer, purchaser is liable for excess use, wear, mileage and a \$250 disposal fee.

GMAC SMARTBUYSM

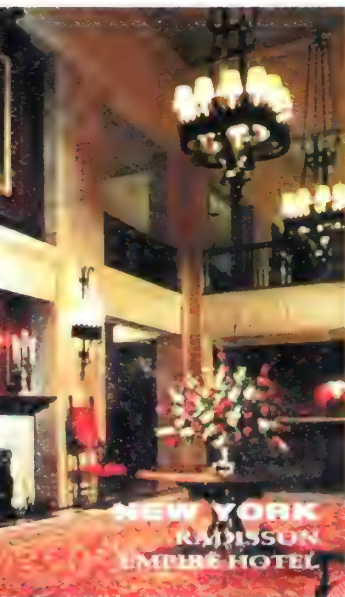
Chevrolet • Pontiac • Oldsmobile • Buick • Cadillac • GMC Truck

"YES I CAN" SPOKEN HERE.

Radisson
HOTELS INTERNATIONAL®



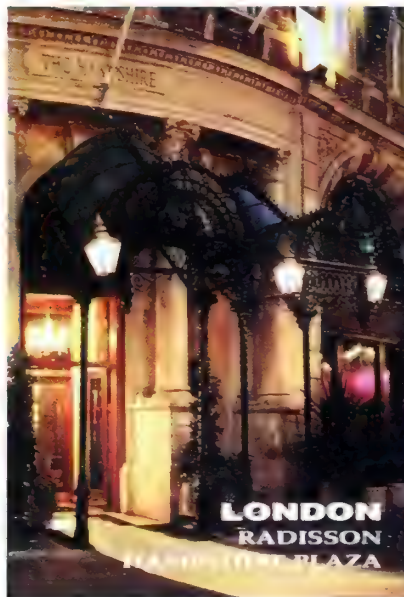
AND HERE.



AND HERE.



AND HERE.



No matter how small the request. No matter how large the task. No matter where in the world. Our positive Yes I Can! spirit helps make every one of our 280 Radisson Hotels as individual as the people who stay in them.

Why get a room when you can get a Radisson?

800-333-3333

IN THE UNITED STATES AND CANADA

IN LONDON 0800-89-1999

IN SPAIN: 900-95-1441

IN MEXICO: 91-800-90-0-90

IN GERMANY: 0130-81-44-42

red a small insurer called Associated
dison for \$2.2 million. Four years and
eral acquisitions later, he sold it to
merican Can Co. for \$162 million. Tsai
ied American Can, too, and his ef-
ts to help transform the old-line man-
cturer into a high-growth financial
vices company won him the CEO spot
1986. He boasted then that within five
rs, American Can would be "an enor-
us company and very profitable."

Got on his watch, American Can,
ch Tsai renamed Primerica, wound
buried in the debt taken on to finance
h acquisitions as Tsai's 1987 purchase
troubled Smith Barney. Harris-
am & Co. Operational problems—es-
sally at Smith Barney—also emerged,
tilting in a severe capital crisis. Tsai
forced to sell out to financier Sam-
l I. Weill's Commercial Credit Group
for \$1.7 billion in cash and stock.
deal gave Primerica stockholders
25 a share, a 10% premium over mar-
value, but it hardly made up for the
p drop in value from Primerica's
7 peak of \$54. Tsai, meantime, re-
ed payments of about \$40 million
n the company as part of the deal.
ording to the 1988 proxy statement,
s Weill set out to repair Smith Bar-
and turn Primerica into a solid per-
ner. Tsai sold most of his Primerica
k and began looking for new invest-
ts. He targeted the annuity busi-
s. With the help of Salomon Brothers
he mulled rounding up investors to
a large insurer. But then he spoke
a friend on the Delta Life board,
a whose single largest shareholder
ederal Express Corp. Chairman
lerick W. Smith, longed to expand
was wary of besmirching its pristine
nee sheet. Tsai offered to pump in
n capital for an equity stake, and
a found the match irresistible.

AL HERO. Tsai is barreling ahead. He
ed \$8 million of his own money on
bet and put together an all-star
up of investors that includes Bear-
rns's Rosenwald; Herbert J. Seigel-
rman of Chris-Craft Industries; and
P. Steinberg, chairman of Reliance
up Holdings. Tsai says raising the
was a breeze. "Because [the invest-
] knew I was involved, some didn't
bother reading the signing docu-
t," he says.

Memphis, at least, Tsai is a hero
n. Over the next two years, he plans
ike Delta Life public, diversify into
t management, expand out of the
h, and acquire more companies in
ed businesses. So what's Tsai's new
? "Anything I want it to be," he
s. But as Tsai knows, titles don't
er much without performance.

By Rod Stodghill II in New York

Buy And Hold.



THE DIAMOND ANNIVERSARY BAND.
Whether it's your 1st, 5th or 10th anniversary, this year,
tell her you'd marry her all over again.

A diamond is forever.

De Beers

Suggested retail price for ring \$6,000. For more information, call 800 251-7474.

EBH 990
COLLECTION

The Copier Built For Your Bottom Line



RICOH FT6750

These days, the bottom
line is the top priority. Which
is why Ricoh designed our
FT6750 copier to automatically
feed, edit, sort, cover and
staple reports.

The RICOH FT6750
does it all for under \$15 a
day.* So get your office
running at top speed for
less than top dollar. Call

1-800-63-RICOH, ext. 1364, now.

RICOH®

Where Imagination Becomes Reality

*Based on a 100% duty cycle, 100 copies per minute, 14" x 11" paper, full-size document handler and an average 10% waste period.

The first index to provide
a performance benchmark
for mid-capitalization stocks.

Standard & Poor's Mid-Cap 400 Index



Encyclopedia of Mammals

File Edit Browse Search Find Location

Help

The first encyclopedia of
mammalian biology with
text, still images, sound
and full-motion video.



The Multimedia Encyclopedia of Mammalian Biology on CD-ROM

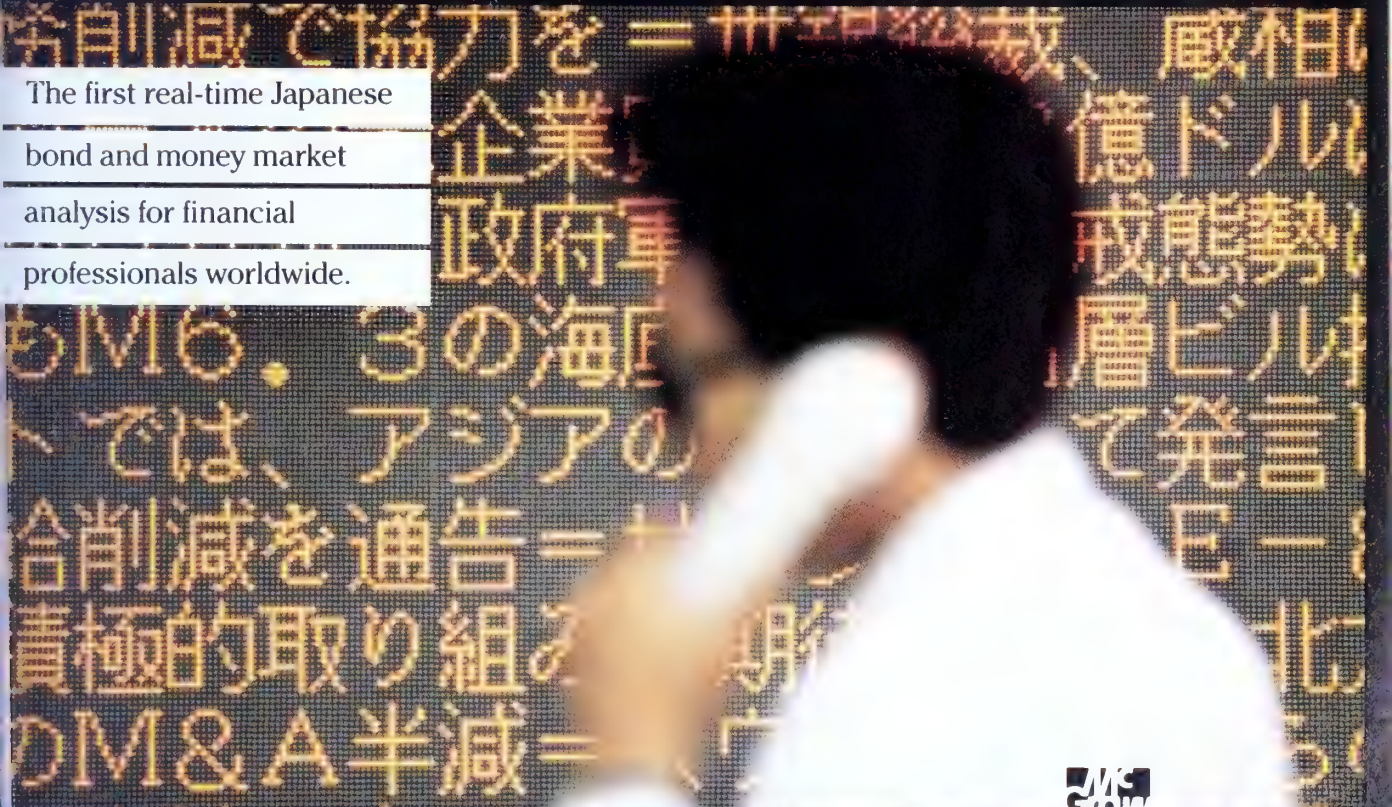


At McGraw-Hill, being first
is almost second nature.



The first multimedia learning
system integrated with a
public television series for the
study of Spanish.

ESTINOS: An Introduction to Spanish



The first real-time Japanese
bond and money market
analysis for financial
professionals worldwide.

MS International's Yen Market Analysis



The first compact disc
combining financial
and full-text company reports
for investment analysis

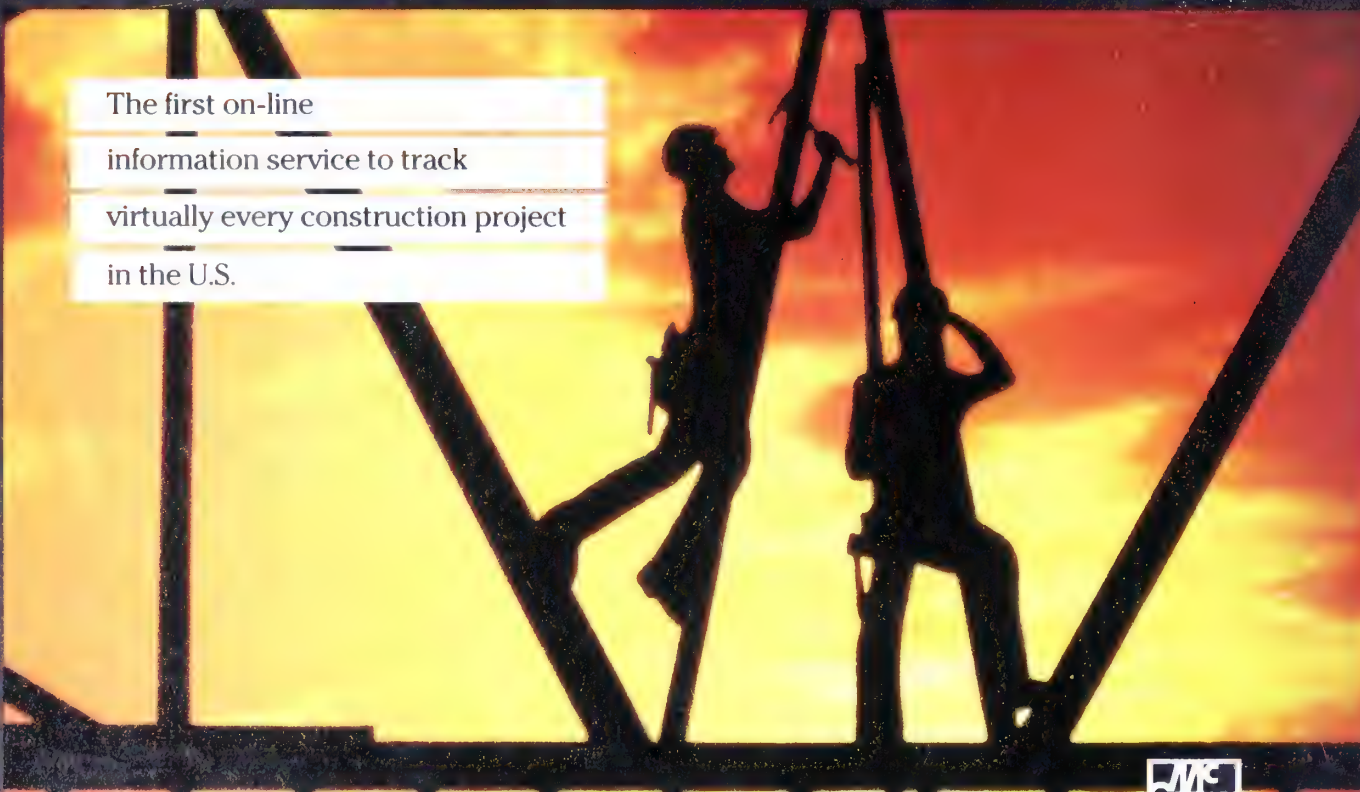
WALL ST



Compustat PC Plus



The first on-line
information service to track
virtually every construction project
in the U.S.



Dodge DataLine

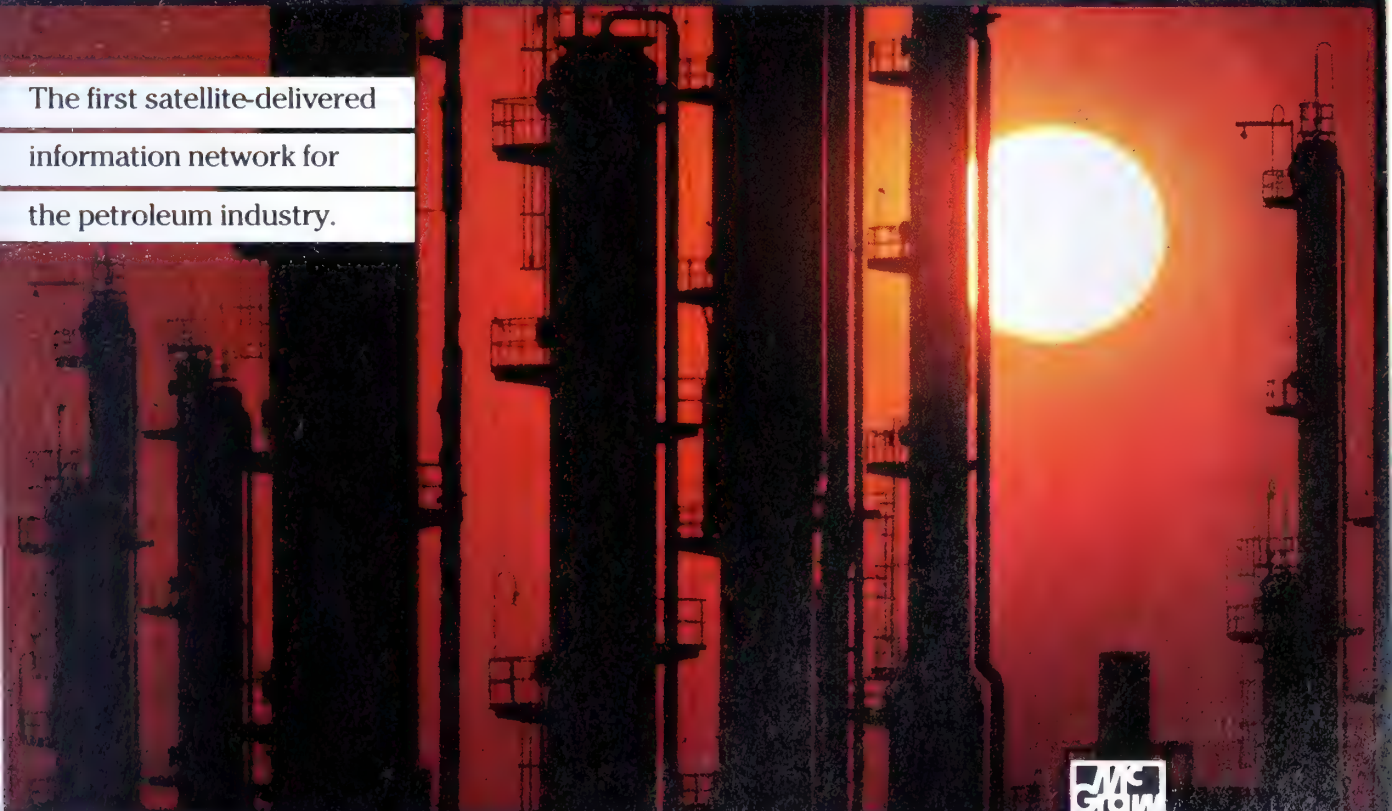


At McGraw-Hill, being first
is almost second nature.



The first computerized
publishing system that
lets teachers customize
their textbooks.

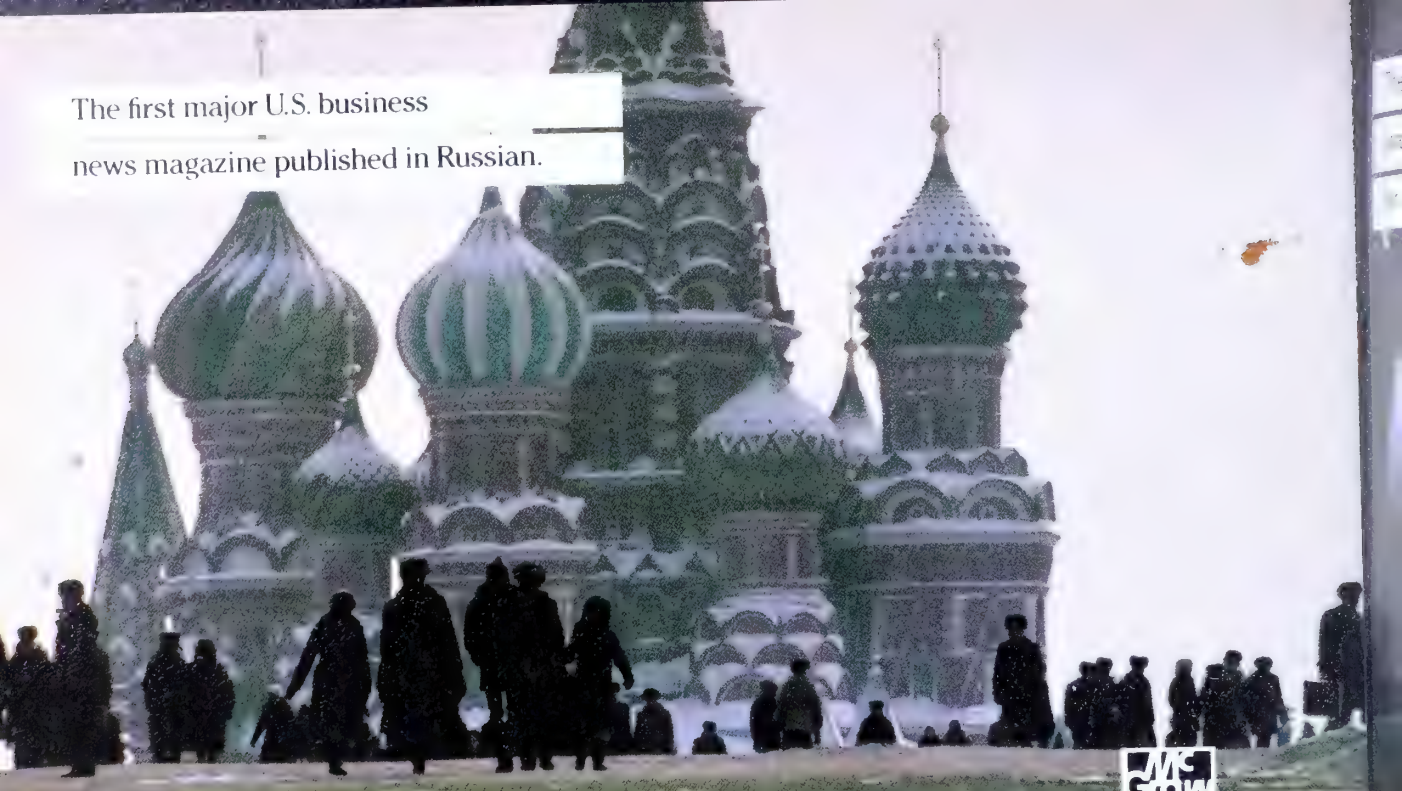
Primis Custom Publishing



The first satellite-delivered
information network for
the petroleum industry.

Platt's Global Alert





The first major U.S. business
news magazine published in Russian.

Business Week/Russian Language Edition



The first on-line database
devoted exclusively to
the aviation and aerospace
industry worldwide.

Aviation/Aerospace Online

In print through books, magazines and newsletters • On-line
over electronic networks • Over the air by television, satellite and FM
sideband • On software, videotape, facsimile and compact disks.

McGraw-Hill provides information in many frequencies: instantly,
daily, weekly, monthly, annually—to meet the growing and changing global
needs of business, industry, education, the professions and government.



The first full citation service
available on-line
for the legal profession.

Shepard's Citations, available on-line



The first on-line database
to offer credit analysis
for the corporate bond market.

Standard & Poor's CreditWire



At McGraw-Hill, being first
is almost second nature.

YOUR NEW CLOUT IN CHOOSING A BANK CARD

Ever since Washington took up the question of credit-card rates last fall, consumers have been on the march. Galvanized by the congressional debate over lofty bank-card rates and President Bush's own remarks that he would like to see credit-card rates come down, cardholders have been demanding an end to 19.8% interest rates now that the prime rate banks charge corporate borrowers has slipped to 6.5%.

Finally, consumers are getting their way. The most telling success was Citicorp's announcement on Apr. 16 that it would reduce rates for roughly 9 million cardholders who have been good customers. Beginning in June, the nation's biggest bank-card issuer will lower rates to 15.9% on new purchases, from the 19.8% that has prevailed through the '80s. Gold-card users will pay 13.9%. Other big banks are bound to follow Citi's lead.

CHOSEN FEW. But before you cut up your existing plastic and apply for a low-rate card, consider a couple of key questions. Remember that not everyone can qualify for bargain-rate cards. In Citi's case, the lower-rate offer is open only to those who have had a Citi Visa or MasterCard for a year or more. Then again, you might not even need a lower-rate card.

The first consideration before selecting any card is

your bill-paying habits. If you're like the 30% of the population who pay off their credit-card bills in full every month, a no-fee card makes more sense. Rates are secondary. The average fee for a standard bank card runs \$17.24. Gold cards are higher, at \$31.50. And the fees can be

substantially higher on some very-low-rate cards.

For those who fall into this thrifty category, there are scores of issuers around the country who offer free cards (table). Most are less well-known than big issuers such as Citi, but their versions of Visa and MasterCard are

readily accepted everywhere. Consider Security Bank & Trust, Southgate, Mich. It charges a high 18%, that shouldn't matter if you pay the bill each month.

GRACELAND. American Telephone & Telegraph Co., which popularized the free-card concept once again offering a no-fee version. But it has limitations. For customers who transfer at least \$1,000 owed on other credit cards, AT&T will again offer a fee-for-life card. The only catch is that you must use its Visa or MasterCard, dubbed the Universal Card, at least once a year. The offer expires June 30.

Consumers who don't pay and are approved will receive checks from AT&T to pay off the other card balances. There are no transaction fees. While AT&T's offer isn't a bad deal if you intend to pay your balance, keep in mind that AT&T's current rate is 16.4%—the best available.

Regardless of what no-fee card you select, pay attention to the grace period. Most credit-card issuers offer 25 days in which there is no interest charged. Generally, you lose this benefit if you carry over a balance to the next month. Even if you make purchases are then subject to finance charges.

Still, if you're like the majority of cardholders who do not balance each month, grace periods and annual fees are primary considerations.



KUPER

rate that counts. Bank rates have declined, but are still fairly steep compared with what banks pay money. The average rate on a standard Visa or MasterCard stands at 18.59%, vs. 1% a year ago.

Herri Detweiler, a director of Bankcard Holders of America, a consumer group, says someone who charges an average of \$2,665 a year and only the minimum every month can save \$410 a year by switching to a card with a rate of 8.5% instead of 19.8%. You're a heavy card user, savings mount.

There are many low-rate cards around the country, and they accept applications nationally. An increasing number of issuers are offering variable-rate cards that move in tandem with a bank's cost of funds, which has been declining. Variable rates may be set monthly or quarterly. Wachovia Corp. offers a 9.4% variable rate for a year and a fixed rate of 1% for \$25. The lower rate that goes into effect at the end of June are based on a variable-rate formula. For example, the rate on the standard card is 9.4 percentage points above the prime.

SIGNAL. Obtaining a low-rate card isn't a snap, though. Lower-rate card issuers are choosier about their customers because they can't afford high delinquency rates. Robert B. McKinley, publisher of RAM Research Corp.'s *CardTrak*, a Frederick (Md.) letter, says only 15% of applications for cards charge 1% and lower are approved. The acceptance rate rises as the rate increases. At 19.8%, the rate is up to 40% to 45%.

Cards with rock-bottom rates have other drawbacks, such as acceptance. Some of the best bargains are available from issuers in Arkansas, where state usury laws cap card rates to five percentage points above the Federal Reserve discount rate, 5.5%. Banks there, such as Simmons First National of Pine Bluff, are being hit with calls. With an al-

luring 8.5% rate, Simmons has been averaging thousands of calls a day. And out-of-state consumers may have to wait up to 90 days to have their applications processed.

What's more, bargain-rate cards can have much lower credit limits. The average bal-

ance at Simmons is \$800, McKinley says. Nationally, the average balance for bank cards is \$1,400.

Then there's the question of service. Many cardholders have become accustomed to the luxury of 24-hour, toll-free numbers to check on their bal-

ances. Smaller issuers generally limit account inquiries to normal workday hours. And don't look for elaborate enhancements, such as purchase protection and travel-accident insurance. Most are bare-bones operations.

One exception is Abbott Bank in Omaha. Abbott's Visa and MasterCard offer the same kind of enhancements available from big issuers. The difference is that Abbott's card doesn't have an annual fee, and it charges less interest than larger banks do. Its variable rate, now 16.3%, is pegged three percentage points below the average rate of the top 10 issuers.

LEGWORK. Once you've decided whether you're a no-fee or low-rate user, deciding on a specific issuer will take a little legwork. The chances that you'll find a bargain-card solicitation in the mail are nil: Most of these banks don't do heavy marketing.

To help you in your search, however, you can write to the Bankcard Holders of America (560 Herndon Parkway, Suite 120, Herndon, Va. 22070), or phone the organization (800 327-7300) for its list of 47 no-fee and low-rate cards. BHA charges \$4 for postage and handling. Consumers can also send away \$5 for an issue of McKinley's *CardTrak*, which includes a list of bargain cards every month (Box 1700, Frederick, Md. 21702).

You also might check with your credit union. Many offer no-fee, low-rate cards. And don't hesitate to nag your bank. With banks feeling the heat from cardholders, credit-card terms have become largely negotiable.

If you're a good customer and have other business relationships there, such as checking accounts, certificates of deposit, or a mortgage, some banks may give you a break on interest rates. McKinley says that others may also be willing to reduce or waive fees on a selective basis just to hold onto customers. Remember, as a cardholder, you have a lot of power these days. Don't be afraid to use it.

John Meehan

SOME LOW-RATE CARDS FOR HEAVY BORROWERS...

Issuer/ Visa and MasterCard/Telephone	Annual fee	Interest rate
ARKANSAS FEDERAL SAVINGS Little Rock/800 477-3348	\$35	8.5%
SIMMONS FIRST NATIONAL BANK Pine Bluff, Ark./501 541-1304	35	8.5
WACHOVIA Wilmington, Del./800 842-3262	39	9.4
PEOPLE'S BANK Bridgeport, Conn./800 423-3273	25	11.5
BANK OF MONTANA SYSTEM Great Falls, Mont./800 735-5536	19	12.25
BANK ONE, CLEVELAND Cleveland/800 395-0010	20	13.2
UNITED MISSOURI BANK Kansas City, Mo./816 471-6575	20	14.5
OHIO SAVINGS BANK Cleveland/800 962-2025	25	14.75
FIRST NATIONAL BANK Omaha/800 688-7070	20	14.9
CRESTAR BANK Richmond, Va./800 368-7700	20	15.9

...AND NO-FEE OPTIONS FOR THE THRIFTY

Issuer Visa and MasterCard/Telephone	Interest rate
BANK OF NEW YORK Newark, Del./800 942-1977	11.9%
AFBA INDUSTRIAL BANK Alexandria, Va./800 776-2265	12.5
USAA FEDERAL SAVINGS BANK Tulsa/800 922-9092	12.5
UNION PLANTERS BANK Memphis/800 628-8946	15.25
ABBOTT BANK Omaha/800 999-6977	16.3
SECURITY BANK Monroe, Mich./313 241-6262	18.0
SECURITY BANK & TRUST Southgate, Mich./800 444-8060	18.0
MORE CARD Evansville, Ind./800 453-2017	19.8
HOUSEHOLD BANK Salinas, Calif./800 477-6000	21.0

DATA: BANKCARD HOLDERS OF AMERICA

Travel

IN CHILE, IT'S JUST STARTING TO SNOW

Despite some late-spring snowstorms, virtually all the big U.S. ski areas have called it a season. But that doesn't mean skiers have to store their gear until next December. In Chile, winter is coming on fast, and some Andean slopes will shortly be coated with fresh powder. From mid-June through mid-October, a half-dozen areas near Santiago offer great skiing.

Virtually all flights to the smoggy, bustling capital are overnight, about nine hours from Miami. Then, a 90-minute ride by bus or limo takes you 9,000 feet higher, to the clear air of the ski-resort neighborhood. The facilities range from staid Portillo to ultramodern Valle Nevado.

Unlike devotees of South



SKIING IN PORTILLO: GREAT SLOPES, FEW FRILLS, FOUR MEALS A DAY

American skiing who favor Argentina's isolated Las Leñas area for its casino and other amenities, the serious skiers who head to Portillo forgo frills. They settle for broad slopes, four daily meals in a big dining room, and such 45-year-old traditions as afternoon tea. For some, the scenery is worth the expense: from \$1,200 a week, meals included, to \$1,800 in the peak period of August to mid-September. The old 550-guest ho-

tel resembles a huge grey-and-yellow fort, but it faces a frozen mirror of a lake and is ringed by dark peaks with wide expanses of snow.

In contrast to Portillo's sedate ambience, the five-year-old Valle Nevado complex caters to a youthful, international crowd. Four restaurants specialize in different cuisines, and there are piano bars, outdoor pools, a child care center, cinema, gym, and satellite TV, plus he-

liskiing, hang gliding, and other adventurous pastimes. Walkways and sun decks, a 55-room inn, brand-new room hotel, and a condo complex with 50 apartments. Weekly rates range from \$1,186 to \$2,103 per person, meals included.

PARTY CAPITAL. Valle Nevado's owners plan to expand their network of lifts and trails to other nearby resorts. One, La Parva, is just 10 miles from Santiago. It's favored by weekenders who the condos and tend to raprès-ski with Chilean wine. pisco sours. The practice built La Parva's reputation as party capital of the Andes.

Travel agents such as Mountain Tours (800 296-2200) offer inclusive one-week packages to the resorts. A package from East Coast cities, for example, runs \$2,000 to \$2,300 per person, including round-trip airfare and lift tickets. Think that's steep? Nothing compared to the 10-hour drive to the snow-covered Farellones Road, with 53 hairpin turns, that leads from Santiago up to the mountains. Don L.

'Paper! Getcha paper.'

The cry of the newsboy is, metaphorically speaking, resounding on Wall Street. After nearly a decade of depressed prices, sluggish demand, and near-rampant overcapacity, papermakers are on the rebound. As earnings seem to be bottoming out, share prices of paper manufacturers are soaring.

So far this year, stocks of paper and wood companies have gained 9.5%, vs. a 1.4% decline in the Standard & Poor's 500-stock index (chart). Among the biggest gainers have been industry giants such as Georgia-Pacific (up 30% since Dec. 31), Louisiana-Pacific (up 59%), and Weyerhaeuser (up 34%). Some brokerage-house analysts are waxing rhapsodic, noting that orders and shipments are on the mend and that prices are firming. Still, investors have some reason for cau-

Smart Money

PAPERMAKERS COME OUT OF THE WOODS

tion. "Some grades of paper have done well, but others are poorly positioned for recovery," warns Mark S. Rogers, an analyst at Prudential Securities.

One of the papers that's not so well positioned is

right in front of you. Coated paper is used to make magazines—including this one—and the magazine business, alas, has been mired in recession. Demand is expected to rebound this year, but European competition should still depress prices.

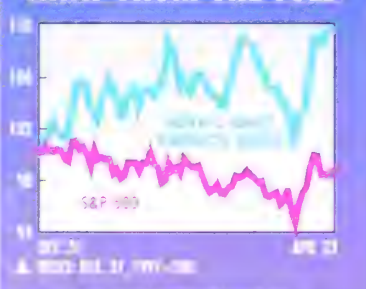
ENVIRO-BOON. For newsprint, the outlook also remains gloomy. Consumption fell 7% last year, but overcapacity should keep prices low, despite an expected rebound in demand. That bodes ill for big newsprint manufacturers such as Bowater and Boise Cascade.

Better tidings are in store for makers of plywood, linerboard, and ordi-

nary uncoated paper. But the brightest prospects of all are out in the forest: large logging operations. Environmental constraints have meant a loss of capacity, a long-term bonanza for the industry. Rogers' favorites include the huge timber companies: Louisiana-Pacific, Georgia-Pacific, Weyerhaeuser, and Willamette Industries, a 31% gainer so far this year.

At first blush, these companies seem pricey. Willamette, for example, is trading at 31 times earnings. But when you look at projected earnings, Willamette is trading at a more reasonable ratio: 20 times estimated 1992 earnings. And as long as ecological concerns continue to squeeze industry capacity, paper and wood companies should go on trading at handsome price multiples. As Rogers puts it: "Environmentalists are the industry's best friend." Gary W.

PAPER STOCKS BREAK AWAY FROM THE FOLD



Now that WordPerfect users prefer Microsoft Word for Windows, we're spreading the Word.



The 1992 Coast-to-Coast Word Challenge.

We're calling it "The Word Challenge." In the weeks to come, we'll be traveling east-to-west testing WordPerfect® for DOS

NSTL TEST RESULTS, DECEMBER 1991

	Word for Windows	WordPerfect for Windows
Preferred to use	79%	21%
Easier to learn	71%	21%
Easier to use	83%	13%
Would purchase	79%	21%

users to find out which word processing program they prefer for everyday word processing tasks.

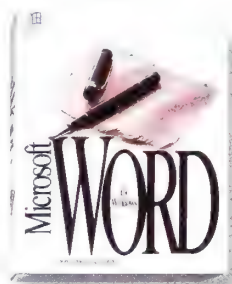
It started last December when, in a test conducted by the National Software Testing Labs, nearly eight out of 10 WordPerfect for DOS users preferred Word for Windows™ over WordPerfect for Windows.

As excited as we were about the results, we're even more excited about the prospect of finding out if WordPerfect users all over the country feel the same way. So, we're taking

the NSTL show on the road to ten cities. Everywhere from Washington, D.C. and Minneapolis, to Dallas, Salt Lake City and Los Angeles.

Call for a free "Word Challenge Kit." Included is a videocassette highlighting the test, and interviews with WordPerfect users who took the challenge. Also in the kit are the files you need to test Word on your own. Call (800)

323-3577, Department Z53. We think once you judge for yourself, you'll want to take advantage of our special \$129 upgrade offer.* Then, no doubt, you'll end up spreading the word for us.



Microsoft
Making it easier

Offer good for current licensees of WordPerfect, MultiMate®, WordStar®, MS® Word for MS-DOS®, and DisplayWrite®. Please allow 2-4 weeks for delivery upon receipt of order by Microsoft. Offer expires 6/30/92. Limit one per customer. Reseller prices may vary. System requirements: Offer good only in the 50 United States. To receive only the NSTL test results. In the United States, call (800) 323-3577, Dept. Z53. For information only. In Canada, call (800) 563-9048, outside the U.S. and Canada, call (206) 936-1992. Microsoft Corporation. All rights reserved. Printed in the USA. Microsoft and MS-DOS are registered trademarks and Windows is a trademark of Microsoft Corporation. WordPerfect is a registered trademark of WordPerfect Corporation.

Software

KIDS LOVE TO LEARN WITH THESE PC GAMES

First came Dick and Jane, then *Sesame Street*. Now, there's Nigel's World. Nigel, a globe-trotting photographer, stars in a computer game that teaches kids

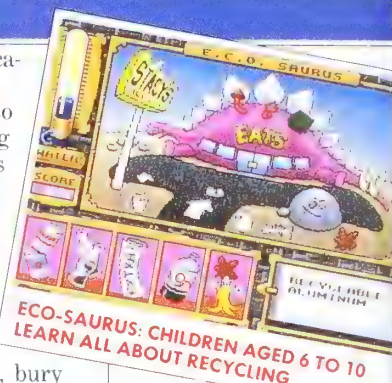
and longevity. "Is a program able to grow along with your kids?" asks Warren Buckleitner, whose *High/Scope Survey of Early Childhood Software* (\$19.95, High/Scope Press) evaluates programs for 3- to 7-year-olds. Games that can be played at varying levels of difficulty can stretch a program's life.

PIANO LESSON. Consistent award winners are Broderbund's *Playroom* and *Treehouse* (\$49.95 and \$59.95, respectively, though prices vary; those listed here are retail for IBM-compatible machines). Almost every object on the

your PC has sound capability.

Computers are also useful for teaching the repetitive drills kids need to master the three R's. After all, a computer can repeat routine problems without losing patience. Many programs for older kids, ages 6 to 10, bury math or grammar problems in adventure games. In the *Super Solvers* series (\$44.95 to \$59.95) offered by the Learning Co., trapping or zapping the agents of the Master of Mischief produces word and math puzzles a child must solve to unmask this rather friendly menace. In another program, *Operation Neptune* (\$59.95), kids solve math problems to negotiate a dazzling underwater maze.

While drills have their place, Judy Salpeter, author



include basic word processing. They encourage to write by avoiding the frustrations of hand-scravling. **ETHNIC DIVERSITY.** Also, ages 6 to 10, children's reading to learn rather learning to read, says Bl and they begin to explore studies and science programs such as Lawr Productions' *Nigel's W* (\$49.95), kids learn about tural diversity. In First B *Eco-Saurus* (\$39.95),



MICKEY'S ABC'S: SELECT THE LETTER "B," AND MICKEY BRUSHES HIS TEETH

geography as they "travel" with him on his faraway assignments. Just as earlier generations relied on books and TV to supplement classroom learning, today's kids are turning to PCs. But with 10,000 educational programs on the market, parents can be overwhelmed with choices.

Where to begin? First and foremost, a program must be engaging and fun, says Marion Blank, co-author of *A Parent's Guide to*

screen performs a trick at the click of a mouse. In *Treehouse*, the keyboard turns into a piano on which kids can play and compose music. Or climb into the piano to play a kid's version of *Name That Tune*. A car-racing game teaches math, a theater game helps with grammar skills, and an animal game introduces basic biology. Such programs could appeal to siblings of different ages for years.

For 2- to 5-year-olds who haven't mastered reading, talking programs are a must. Macintosh PCs have good built-in sound, but for IBM clones, you might invest some \$200 for a sound card to improve quality.

In *Mickey's ABC's* from Walt Disney (\$49.95), Mickey Mouse runs around his house highlighting objects that start with the letter your child pushes on the keyboard. A "B" sends Mickey to the bathroom to brush his teeth. At the same time, the letters and words are displayed on the screen—and spoken, if



OREGON TRAIL: OLDER KIDS CAN EXPERIENCE LIFE ON A WAGON TRAIN IN 1848

of *A Parent's Handbook: Kids & Computers* (\$16.95, Sams) prefers open-ended programs that let kids explore, write, and draw according to their own inspiration. Programs such as Davidson's *Kid Works* (\$49.95) or Broderbund's *Kid Pix* (\$59.95) are graphics programs that in-

learn about recycling. Educational programs for kids age and up exercise reading skills. In *The Oregon* (\$49.95), they experience a wagon journey through Northwest in 1848, deciding how to apportion food and resources. Maxis' *SimCity* (\$49.95) and *SimEarth* (\$69.95) for ages 12 and up children at the helm of a planet, respectively, which they must balance environmental, economic, and political factors. Such games teach kids to plan ahead, adapt to changes, and make decisions—skills most adults could probably afford to brush up on, too. Pam



Educational Software (\$14.95, Microsoft Press). "Kids will do what they're asked in school, but no one's going to look at a dreary program at home."

Other factors to consider are ease of use, interactivity,

Worth Noting

■ **TAX TIP.** If you're buying or refinancing a house and know you'll need a loan soon for tuition or a car, take out as big a mortgage as you can, invest the excess cash, and use it instead of borrowing more. That way, according to KPMG Peat Marwick, you maximize tax-deductible

interest. The strategy begins by getting a home-equity loan later: You save original costs and don't need to pay creditworthiness again. ■ **AIR GOLF.** IDEA Corp. Power DrivAir is a golf simulator that strengthens your swing by adding air assistance. The boxy device is meant for home workouts. Find it at sports stores (\$49.95) or call 800 882-54

FAIRFAX COUNTY. FUELED BY AN INEXHAUSTIBLE SUPPLY OF WOMANPOWER, MANPOWER AND BRAINPOWER.



So who is working for the many successful companies located in Fairfax County? America's best-educated work force, that's who.

Companies here, such as EDS, Rockwell International, TRW, Mobil, and AT&T tap the largest pool of Ph.D.s in the country, more than 20,000 strong. And 96% of all adults in the County have high school degrees, while 55% have graduated from college.

Many more continue their education at George Mason University or one of five community college campuses in the area.

Importantly, many of these minds are grown right here in one of the nation's best public school systems.

Over 90% of these graduates chose to continue their education, with over 5,000 of them doing so here in Virginia.

And on it goes. The best and brightest thrive and find it impossible to think of leaving.

If you find yourself attracted by this type of environment, send us the coupon. And we'll do everything in our power to convince you to move your company here.

FAIRFAX COUNTY, VIRGINIA

Please send me more information on the business advantages of Fairfax County.

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Phone _____

Fairfax County Economic Development Authority,
8300 Boone Boulevard, Suite 450, Vienna, Virginia 22182
Telephone (703) 790-0600. Fax (703) 893-1269. BW1

In a year of
breaking business
news,
we never broke
our stride.





No matter where news broke in 1991. Whether it happened close to home or halfway around the world. The best place to read about its impact on a wide range of industries was in the pages of Business Week.

With more than 200 editors in 25 bureaus, we gave our 7.3 million worldwide readers global coverage of all the events that impacted their businesses--while the news was still hot. And we did it with the depth and tough-mindedness that's made us the most widely read business magazine among the world's top executives.

Every week of the year.

BusinessWeek
PROFIT BY IT.





**REMEMBER THE LAST TIME YOU
WERE STUCK IN A SMALL SEAT WITH A
TRAY FULL OF FOOD YOU HATED?**

YOU WERE MISERABLE. Strapped into a tight seat for what seemed like hours, expected to swallow something you just knew was bad. It was enough to put practically anyone out of sorts. And the worst part of it is, this wasn't some childhood memory. It was your last business trip.

Unless you flew Alaska Airlines. We think dining should be

an occasion of pleasure, not pain. We offer an extremely savory menu of flavorful regional dishes.

We frequently serve fresh Pacific

Alaska Airlines

Northwest salmon and only use Choice grade beef. We always offer complimentary local wines. And because we cook most dishes on the spot, in kitchens throughout our service area, we use more fresh ingredients than other airlines generally do.

On top of that, we give you, on average, a couple of inches more legroom than any major U.S. airline.

And since we're consistently voted the best U.S. airline by *Condé Nast Traveler* readers, we are evidently not alone in thinking that at mealtime, you deserve better.

To find out how pleasant an airline meal can actually be, just contact your travel agent

or Alaska Airlines directly

at 1-800-426-0333.



We spend more money per passenger on food than any major U.S. airline. Making us a truly different airline.

Index to Companies

Index gives the starting page for a story or feature. A significant reference to a company. Most companies are indexed under their own names. Companies listed only in tables are not included.

a Brown Boveri **52**
 ank **112**
 ystems **34**
 dustrie **78**
 ent-A-Car **36**
 e Bank
 and **53**
 an Airways **78**
 ance **84**
 Airlines **36, 78**
 Express **34**
 International
32
33, 93
 am-Rotterdam
3
 r-Busch **42**
 intain Tours **114**
3
 andersen **44, 46**
 arch **93**
7, 74, 112
 Richfield **49**

e Gas & Electric **34**
 Bilbao **53**
 Vizcaya **53**
 America **89**
 Bank **53**
 arns **102**
 ntic **34**
16, 78
 scade **114**
114
 nd **116**
 i-Ferris **67**
38

wley Hale **38**
 ar **42**
 acific Airways **78**

s Development **88**
 n International **34**
 l Steel **92**
 ft Industries **102**
5
112
 ncial **102**
 ional **84**
 ound **44**
 ial Credit
102
 bank **52**
93
 tal Airlines **78**
 nd **40**
8

J
 annais **84**

116
 puter **93**
 Lines **78**
102

quipment **93**
 nal Measurement
101

Donaldson, Lufkin &
 Jenrette **20**
 Dow Chemical **32, 74**
 Drexel Burnham
 Lambert **12, 84**
 Du Pont **74**

E
 Equimark **34**
 Estee Lauder **38**
 E-ll Holdings **84**
 Exxon **33**

F
 Federal Express **102**
 Fidelity Investments **40, 88,**
92, 102
 Financial Relations
 Board **44**
 First Byte **116**
 First Executive **84**
 Ford **5**
 Fuji Heavy Industries **53,**
57

G
 Gateway 2000 **93**
 GE **53, 57**
 Gemstar Development **101**
 General Dynamics **34, 46**
 General Electric Capital **38**
 Georgia-Pacific **114**
 GFC Financial **92**
 Gillett Holdings **84**
 GM **5, 34, 37, 93, 102**
 Goodrich (B.F.) **32**
 GPA Group **78**
 Grantham Mayo Van
 Otterloo **92**
 Grant Thornton **88**
 Great Western
 Financial **89**
 Growth & Income Fund **40**
 Grumman **34**
 Gyproc **74**

H
 Hershey Foods **36**
 Hertz **36**
 High/Scope Press **116**
 HomeFed Bank **89**
 Hongkong & Shanghai
 Banking **53**
 Hunioki **5**

I
 IBCA **53**
 IBM **12, 34, 93, 116**
 IDEA Corp. **116**
 I. Magnin **38**
 InSight Telecast **101**
 Institutional Shareholders
 Services **34**
 Inter-American
 Dialogue **76**
 Interco **84**
 International Data **93**
 International Lease
 Finance **78**
 Investment Company of
 America **40**
 Investors' Fiduciary
 Services **34**
 ITT Sheraton **36**

J
 Janus Capital **88**
 Japan Air Lines **78**
 JGC **67**

K
 KeyCorp **36**
 Kohlberg Kravis Roberts **12**
 KPMG Peat Marwick **116**
 Krusch Hotels **80**

L
 Lawrence (C.J.) **36, 78**
 Lawrence Productions **116**
 Lazard Freres **78, 80**
 Learning **116**
 Legg Mason Wood
 Walker **92**
 Lehman Brothers **37, 38**
 Llama **80**
 Lloyds Bank **53**
 Lockheed **46, 93**
 Louisiana-Pacific **114**

M
 Macy (R.H.) **38**
 Magellan Fund **40**
 M&M/Mars **36**
 Marc Rich **42**
 Marriott **34**
 Maxis **116**
 Mazda **53, 57**
 McDonnell Douglas **78**
 McGraw-Hill **30**
 MECC **116**
 Memorex Telex **84**
 Mercedes-Benz **52**
 Merck **67**
 Merrin Information
 Services **93**
 Microdynamics **101**
 Microsoft Press **116**
 Mid-American Waste
 Systems **88**
 Midland Bank **53**
 Miller Brewing **42**
 Minstar **46**
 Mitsubishi Heavy
 Industries **80**
 Mobil **33**
 Monsanto **74, 32**
 Morgan Stanley **20**
 Morningstar **40**

N
 National Westminster
 Bank **53**
 Nissan **5**
 Northgate Computer
 Systems **93**
 Northwest Airlines **78**
 Novo Nordisk **74**

O
 Occidental Petroleum **34,**
93
 Ogden Projects **88**
 Olivetti do Brasil **54**
 Oppenheimer **88**

P
 Petrobras **54**
 Pfizer **93**
 Philip Morris **49**
 Price Waterhouse **80, 89**
 Primerica **102**
 Private Asset Management
 Group **46**
 Procter & Gamble **74**

PRS **101**
 Prudential Securities **114**

R
 RAM Research **112**
 RAND **32**
 Rauscher Pierce Refsnes **92**
 Ravenswood Aluminum **42**
 Recovery Fund **84**
 Reebok **34**
 Reliance Group
 Holdings **102**
 RJR Nabisco **12**
 Royal Dutch/Shell
 Group **67, 74**

S
 Saatchi & Saatchi **92**
 Salomon Brothers **20, 78,**
102
 Sams **116**
 Sanifill **88**
 Sears Roebuck **12, 34**
 Security Bank & Trust **112**
 Select Energy Services
 Fund **40**
 Simmons First National
 Bank **112**
 Slovak State Aluminum **42**
 Smith Barney Harris
 Upham **102**
 Smith Corona **93**
 Statoil **74**
 Stroh Brewery **42**
 Sustainability **74**

T
 Telebras **54**
 Texas Industries **92**
 Thai Airways
 International **78**
 3M **74**
 Time Warner **34, 93**
 Tokai Bank **36**
 Tongcheng Filter
 Elements **5**
 Travelers **34**
 T. Rowe Price **84**
 TRW **49**
 TWA **84**

U
 Unisys **34**
 United Air Lines **78**
 United Technologies **37**

V
 Value Line **5**
 Verex Assurance **92**
 Volkswagen **52**

W
 Wachovia **112**
 Walt Disney **116**
 Wang **34, 93**
 Warner-Lambert **34**
 Waste Management **88**
 Wells Fargo **89**
 Westinghouse **34, 80**
 Westinghouse Credit **80**
 Weyerhaeuser **114**
 Willamette Industries **114**
 Winn-Dixie Stores **36**
 Woodward-Clyde
 Consultants **93**
 WorkGroup
 Technologies **93**

Z
 Zell/Chilmark Partners **38**



Colibri
 LE GRAND

Lifetime Mechanical Warranty

Available at

JCPenney

or call 1-800-556-7354

**WHEN 19,000 CAREERS
ARE ON THE LINE**

**WHO DO YOU WANT
STANDING BEHIND YOUR
PHONE SYSTEM?**

©1991 Fujitsu Business Communication Systems.
F9600 is a trademark of Fujitsu Business Communication Systems.



Forget ivy-covered walls and lounging on the grass. Today's students are rushing to meet the 21st Century. Libraries are now "multimedia buildings." Lecture halls are "instructional telecommunications centers," and laboratories are "applied technology facilities." At California State University, Fresno, there's even a special system to integrate all of these resources. It's called a telephone.

Actually, the students of CSUF call it the "super phone" – and rightfully so. By integrating all voice, video and data communications, this massive digital network provides access to thousands of on-campus computer workstations, telephones and telecommunications services. From the status of a starting freshman to the final grades of a graduating senior, the F9600™ system puts it all on the line.

To learn more about our super phone, just pick up your telephone. Call 1-800-553-3263.



The F9600 Digital Telephone from Fujitsu – a \$21 billion global telecommunications leader serving over 100 countries

FUJITSU

The global computer & communications company

FLY DOWN TO RIO, MR. BUSH

George Bush is getting mixed advice on whether he should attend the U.N. Conference on Environment & Development in Rio de Janeiro in June. We think he should. His presence would send a message about the importance of the issues, while his absence would stick out like a sore thumb—since the heads of state or government of other important industrialized countries will attend. Besides, the possible payoff—reducing the conflict between economic growth and environmental protection—is too great to be passed up, especially with two valuable, legally binding treaties on the table.

Where should the U.S. stand at the meeting? For a start, Washington should endorse the Rio Declaration, a far-reaching statement with many worthy goals—from the eradication of poverty to the principles of sustainable development (page 66). Then, the U.S. can perform a real service by injecting a strong dose of reality into Agenda 21, an 800-page action plan designed to achieve these goals. We agree with many of the ideas expressed, including more efficient use of energy and materials, family planning, and increased aid to developing countries. But Agenda 21 would require a degree of political cooperation and surrender of sovereignty that just isn't going to happen anytime soon.

The developing countries are asking the industrial world for \$75 billion a year in additional aid for the next seven years. President Bush is right to be leery of making a bad deal for the U.S. Given the budget deficits at home, the uncertain world economy, and the needs of the former Soviet Union and Eastern Europe, it's unrealistic to expect industrial countries to dig into their pockets for much additional money. But by redirecting existing foreign aid,

Washington ought to be able to put a few billion a year into programs to implement parts of Agenda 21. Similar options are open to other industrialized nations. Without funds, developing countries aren't going to do anything—and it's a fact that poverty destroys the environment as much as industrialization's pollution, as the devastation from deforestation and overfarming show.

At the meeting, the U.S. will have to take positions on a number of other thorny issues. The most controversial is climate change. The industrial world will be under pressure to reduce carbon-dioxide emissions. But the cost would be enormous, and there is still debate over how much to threaten such emissions pose. It is far more reasonable to aim instead at stabilizing emissions at early-1990s levels by the turn of the century. Implementing measures for energy efficiency already proposed such as the Administration's National Energy Policy, plus a judicious mix of additional incentives for energy efficiency, could make this goal attainable in the U.S.

The conference will also produce a treaty seeking to serve biodiversity, the whole array of plants, animals, and other life that share the world. Here a key issue is that developing nations want to be paid for the use of their biological resources, such as medicines from tropical plants. That can be done in a sensible way, the U.S. should agree to reasonable compensation. But the developing countries should show, to the U.N.'s satisfaction, that the money is being used efficiently and effectively.

The Rio Conference is the start of a very long but ultimately worthy process. As the richest country in the world, the U.S. has a major role to play. And an obligation.

STICK TO YOUR GUNS, HERR KOHL

It is a strong measure of the grip Germany has on the imagination of its Western partners that there are suddenly so many worries about Chancellor Helmut Kohl's ability to keep the German economic locomotive chugging (page 52). In the first major German labor trouble in 18 years, 2.8 million public-service workers have called work stoppages in pursuit of a 5.4% pay raise. Germans, suddenly aware that their cherished mark will be devalued by currency union with the rest of Europe, have developed cold feet about Kohl's beloved Maastricht Treaty, which provides for the integration of European Community currencies as well as social and foreign policies by 1999. And the co-author of that treaty, Hans-Dietrich Genscher, resigned after 17 years as the Federal Republic's Foreign Minister—leaving Kohl without a persuasive and effective domestic ally in the advocacy of a unified Europe.

Kohl is left to grapple with the unexpectedly difficult problems of a unified Germany. The decision to give east

German workers pay parity, which seems to be at the heart of the west German labor unrest, has proved a disastrously costly miscalculation. So has the decision to give the East German mark parity with the German mark. The result is that the unification of the two Germanies has been far more costly than anyone in the West dreamed, and public resentment has fueled protest votes for extremist fringe parties on the right and the left.

Kohl has been underestimated during his 10 years as chancellor—indeed, throughout his career in politics. He has a proven instinct for the political jugular. His decision to take a stand with the public-service workers is right. If he can extract a settlement from them close to his 4.8% raise offer, he will have taken a giant first step toward restoring the confidence of Germany's shaken business community. That, in turn, is what's needed to restore the confidence of his allies that the German locomotive is not stuck in the *Bahnhof*.

STOCKS THE NEW PROGRAM TRADERS **PROFITS** FIRST-QUARTER RESULTS OF 900 COMPANIES **MEDICINE** BERNADINE HEALY SHAKES UP THE NIH

NESS WEEK
May 18

BusinessWeek



9042 03330572 0

AY 18, 1992

A MCGRAW-HILL PUBLICATION

\$2.75

THE ECONOMIC CRISIS OF URBAN AMERICA



94010-408

BURLINGAME CA
480 PRIMROSE RD
BURLINGAME PUBLIC LIBRARY

0602 105811160 DEC92 131 3227

94010

*****5-DIGIT





OS/2

In Canada, call 1-800-485-1234. * Upgrade from Windows 3.11: upgrade from DOS 5.03. \$149 basic operating system. These prices valid only when ordered directly through IBM. Proof of purchase required. Dealer prices may vary. Offer valid in U.S.A. only, expires 7/31/92. IBM and OS/2 are registered trademarks and OS/2 Crash Protection and e-Link are trademarks of International Business Machines Corporation. All other products and company names are registered trademarks of their respective companies. © 1992 IBM Corp.

Starting today, everything your computer has ever done, it will do better.

You've created documents, crunched numbers, even conquered alien invaders. Still, your software hasn't really been able to make the most of your hardware. But now it can.

Introducing OS/2® 2.0. It's a new way to take your computer programs beyond the limitations of the past—it lets you do more with them than you ever could with DOS or DOS with Windows®.

It's also a way to run more than one program at a time. Print a document and calculate a spreadsheet while you open files, for example. You can even "cut and paste" between *any* programs—drop text from WordPerfect® 5.1 into a Lotus® 1-2-3® for Windows spreadsheet—the possibilities are endless.

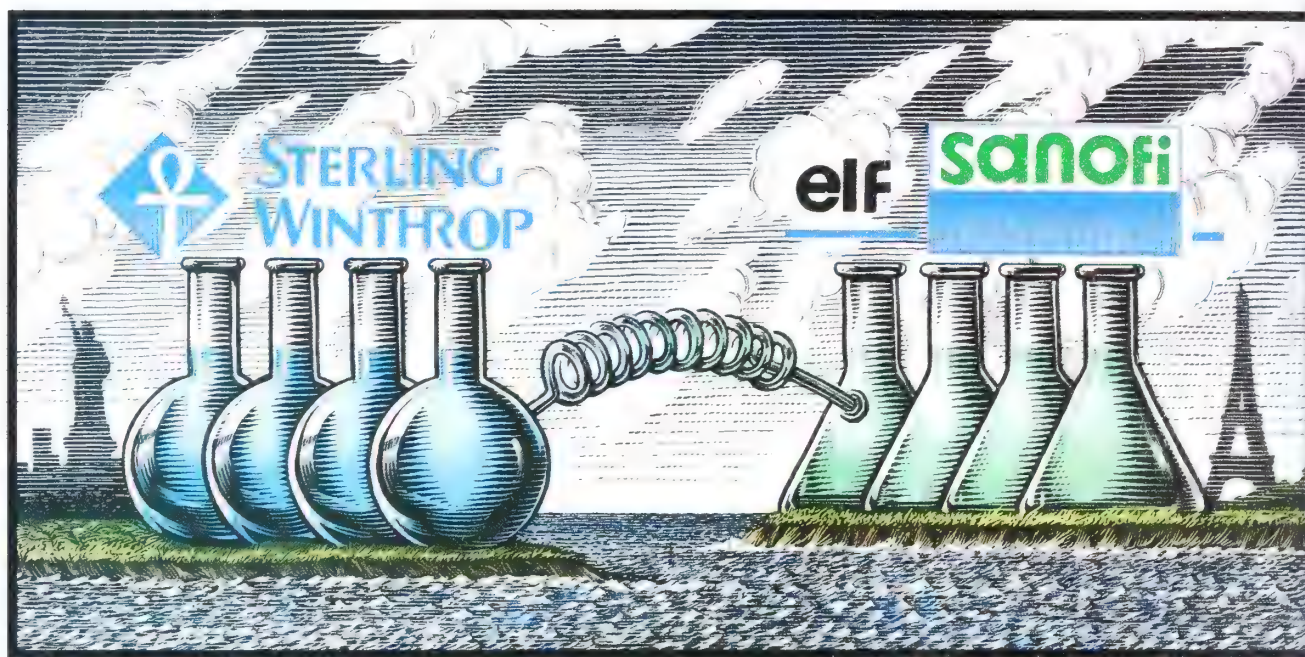
About the only thing better than how much more OS/2 lets you do, is how easily it lets you do it all. Friendly icons fill the screen—even installation is graphically guided. And OS/2 comes with **HelpWare**™: a range of services and support, including a toll-free number. But maybe the best part is that instead of buying DOS, Windows and Adobe Type Manager®, you get them all with OS/2.

With OS/2, your software can catch up with your hardware. And you can do the only thing you haven't been able to do with your computer. Make the most of it. For an IBM authorized dealer near you, or to order OS/2 2.0—at special introductory prices of \$49 for Windows users and \$99 from any DOS—call 1 800 3-IBM-OS2.*



Introducing OS/2 2.0.

- Runs programs made for DOS, Windows and OS/2.
- Runs more than one program at a time so you don't waste time.
- Easy to install, learn and use. Has online help and tutorial.
- Makes the most of 386 SX hardware and above.
- OS/2 2.0 upgrade: \$49 from Windows, \$99 from any DOS.**



FOR STERLING WINTHROP and
ELF SANOFI, the decision to JOIN
FORCES or remain INDEPENDENT
became *surprisingly* SIMPLE. They
discovered a WAY to do BOTH

The companies were poised on either side of the Atlantic like virtual mirror images. Sterling Winthrop wanted to expand its European market. France's Elf Sanofi sought entry into the U.S. And their product lines were nearly complementary.

Merger was one option. Instead, Sterling Winthrop and Elf Sanofi developed an innovative alliance to meet their objectives. Lehman Brothers was appointed by Sterling Winthrop to provide advice and assistance throughout the process.

**A GLOBAL ALLIANCE
PRODUCES A NEW
INDUSTRY LEADER.**

At the heart of the structure are a series of joint ventures. The companies that manufacture, market and sell prescription medicines around the world operate under the name Sanofi Winthrop. The companies that handle over-the-counter medicines in Europe operate under the name Sterling Health.

Through these ventures each company expanded the sales and marketing infrastructures wanted, yet no debt was generated. And through their alliance, Sterling Winthrop and

Elf Sanofi kept their own independent discovery research efforts while gaining the R&D "critical mass" necessary in today's pharmaceutical industry.

When the deal was concluded, the world had gained a new global pharmaceutical leader — with over \$2 billion in alliance sales — even though no cash had changed hands.

**SOLUTIONS AS UNIQUE AS
THE CLIENTS THEY SERVE.**

The alliance of Sterling Winthrop and Elf Sanofi was an unusual situation, but most financial advisory challenges fall into "unusual" these days. Indeed, we at Lehman Brothers believe every situation is one-of-a-kind, and we work with our clients to customize solutions.

Perhaps that is why Lehman Brothers is a leading financial advisor to the pharmaceutical industry. In the last year alone, we worked with numerous healthcare companies ranging from biotechnology firms to some of the largest pharmaceutical companies in the world.

If you have a need for that sort of experience and unique approach to problem solving, we'd like to be involved.

LEHMAN BROTHERS



OUTSIDE ST. VINCENT'S SHELTER IN LOS ANGELES: POVERTY IN THE U.S. IS INCREASINGLY URBAN, AND DISPROPORTIONATELY BLACK

Cover Story

38 THE CRISIS OF URBAN AMERICA

It's time to go back to the page to reopen the debate on race and poverty in America. Why hasn't the plight of the inner city been solved? Why do we have a 'ghetto' in the 'land of the free'? And can we stem the polarization that threatens to poison the search for lasting, equitable solutions? Current economic trends aren't favorable to the poor, but the country can take steps that will help

44 CRITICAL BUT NOT HOPELESS

Amid the partisan bickering, a few plans may actually help cities

42 CAN L.A. RISE FROM THE ASHES?

Rebuilding the city and economy may be a long and painful process

47 COMMENTARY

The riots: 'Just as much about class as about race'

48 TWO NIGHTS IN THE SLAMMER

BW's Russ Mitchell was reporting on the wrong rally at the wrong time

Top of the News

50 FORD GUNS ITS ENGINES

Taurus is neck and neck with Accord for the top spot in the U. S. market—but Camry is coming up fast

51 HAVE SPEECH, WILL TRAVEL

He doesn't do weddings or bar mitzvahs, but Gorbachev's glitzy U. S. tour is raking in big bucks

52 COMMENTARY

It's time to clean up credit reporting—and the Senate has a chance to initiate the effort

55 I WANT MY MTV—STOCK

Parent Viacom needs cash, and a public offering may be next for the growing music-video network

56 TASTES BAD, SELLS BIG

Sour gum, the latest craze among the lunch-box set, is 'puckerlicious'

58 IN BUSINESS THIS WEEK

Carvin' Marvin Runyon comes to the Post Office, the fate of the Seawolf, France vs. U. S. airlines, military etiquette, the classics on disk

International Business

62 GERMANY

An interview with Helmut Kohl: We are far from one Germany

64 EUROPE

As a single market emerges, takeover fever hits the Continent

65 ITALY

Milan's corruption-free reputation is rocked by a bribery scandal

66 INTERNATIONAL OUTLOOK

If the ex-Soviet republics want aid, 'they'd better play ball on nukes'

Economic Analysis

18 ECONOMIC VIEWPOINT

Roberts: What does Perot stand for?

22 ECONOMIC TRENDS

Corporate pink slips, inherited wealth, women and men in the workplace, easier debt service

35 BUSINESS OUTLOOK

The recovery is proceeding by fits and starts



50 TAURUS GOES FOR THE TITLE:
THE CAR THAT SPARKED A STYLING
TREND IS POISED TO VANQUISH ALL
RIVALS AND REGAIN U.S. BEST-SELLER
HONORS FOR FORD

132 TURNING THE CORNER, INCH BY INCH:
BUSINESS WEEK'S SURVEY OF 900
COMPANIES SHOWS FIRST-QUARTER
PROFITS ARE UP 7% OVER THE SAME
PERIOD IN '91

108 THE DOCTOR IS IN:
AROUND THE NIH, BERNADINE HEALY
IS KNOWN AS 'SHE WHO MUST BE
OBEYED.' BUT HER TOUGH MEDICINE
MAY BE WHAT THE INSTITUTES NEED

Government

61 WASHINGTON OUTLOOK
Which candidate will be burned
worst by the fires in Los Angeles?

Sports Business

99 SAVING THE NFL FROM ITSELF
Agent Leigh Steinberg's formula

The Corporation

100 HIGH END, LOW END
Two U. S. machine-tool makers have
sharply different strategies for
meeting the global challenge

Industries

102 COMMENTARY
Can U. S. companies trim overhead?

Arts Business

104 VIVA MEXICAN ART
What's stoking the market

Entertainment

106 THE MOUSE AND I
A Disney deal pays off for Image

Science & Technology

108 PLAYING HARDBALL, HEALY STYLE
The NIH chief won't shy from a fight

113 DEVELOPMENTS TO WATCH
Aiming X-rays, a lube job for ceramic
engines, smarter radar, blue
Mondays, powder for sprains

Finance

114 THE ART OF THE HEDGE
Program traders find a new game

116 COMMENTARY
Why Chapter 11 needs rewriting

118 PLASTIC—FOR A PRETTY PENNY
Here come 'secured' credit cards

120 BIOTECH: A LONG ILLNESS
The stocks won't rebound soon

122 INSIDE WALL STREET
The disk-drive makers making tracks
A real stunner of a stock?
Place your bets on this gambler

161 INVESTMENT FIGURES OF THE WEEK



62 STILL A DISTANT DREAM:
CHANCELLOR KOHL SAYS THE EAST
GERMAN PEOPLE WERE SO DAMAGED
BY COMMUNISM THAT A TRULY
UNIFIED NATION IS FAR AWAY

Information Processing

124 THE NEW IBM
Surprise! It really looks new

128 LOST IN AMERICA
Taiwan's unknown computer makers

129 ACER SEARCHES FOR THE KEY
Rough going for a Taiwanese cloner

130 FAKE WINDOWS, ERSATZ DOS
Uncle Sam tackles Taiwan's pirates

Marketing

131 SUMMER HYPE OF '92
Hollywood marketers' new schemes

Corporate Scoreboard

132 A SLOW BUT STEADY RISE
First-quarter profits: The bottom line
is looking up

Personal Business

156 INSURANCE: Health care options
MUSIC: Teach do-re-mi with A-B-C
SMART MONEY: Picking preferreds

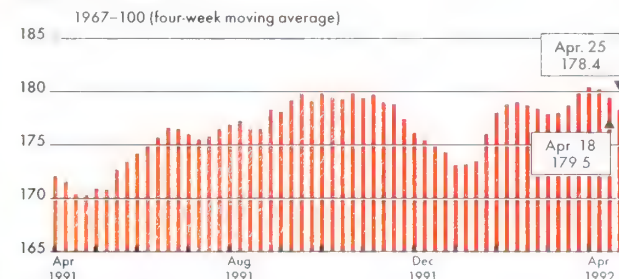
Features

6 BUSINESS WEEK INDEX
10 READERS REPORT
26 BOOKS
Hacker: *Two Nations*
Jones: *The Dispossessed*
Jencks: *Rethinking Social Policy*
159 INDEX TO COMPANIES
162 EDITORIALS
The America we can no longer ignore

BusinessWeek Index

PRODUCTION

Change from last week -0.6%
Change from last year 4.7%

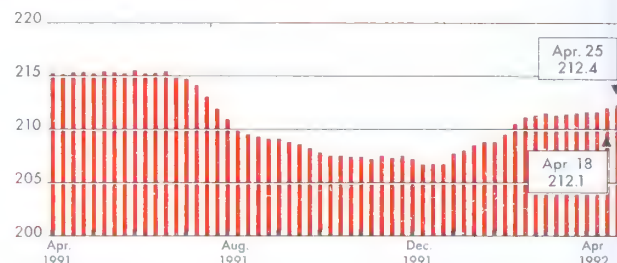


The production index declined during the week ended Apr. 25. On a seasonally adjusted basis, output of trucks, autos, crude-oil refining, paperboard, and rail-freight traffic increased. Electric power and paper production were down, while coal and lumber output were unchanged from the previous week. Before calculation of the four-week moving average, the index dropped to 177.4 from 177.8. But some of that decline likely reflects plant closings for the Easter holiday.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.1%
Change from last year: -1.4%



The leading index barely moved during the week ended Apr. 25, as almost all of the indicators retraced the gains posted in the previous week. On the negative side were lower stock prices, higher bond yields, slower growth rates for materials prices and real estate loans, and an increase in the number of business failures. Growth in M2 was unchanged. Before calculation of the four-week moving average, the index dropped to 212.2 from 213.1.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/2) thous. of net tons	1,792	1,827#	13.6
AUTOS (5/2) units	130,519	107,022r#	12.8
TRUCKS (5/2) units	86,149	75,811r#	10.3
ELECTRIC POWER (5/2) millions of kilowatt-hours	51,854	50,969#	1.3
CRUDE-OIL REFINING (5/2) thous. of bbl./day	13,234	13,420#	-0.9
COAL (4/25) thous. of net tons	18,207#	18,337	-3.4
PAPERBOARD (4/25) thous. of tons	817.1#	809.2r	7.7
PAPER (4/25) thous. of tons	769.0#	776.0r	0.8
LUMBER (4/25) millions of ft.	499.6#	502.9	0.7
RAIL FREIGHT (4/25) billions of ton-miles	20.2#	19.7	8.0

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWP, SFP, Association of American Railroads.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/1) S&P 500	411.41	410.17r	8.8
CORPORATE BOND YIELD, Aaa (5/1)	8.37%	8.33%	-5.2
INDUSTRIAL MATERIALS PRICES (5/1)	97.7	97.5	0.7
BUSINESS FAILURES (4/24)	453	420	10.2
REAL ESTATE LOANS (4/22) billions	\$400.7	\$401.8r	-3.1
MONEY SUPPLY, M2 (4/29) billions	\$3,444.1	\$3,443.1r	1.9
INITIAL CLAIMS, UNEMPLOYMENT (4/22) thous	404	404	-19.2

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
CONSTR. SPENDING (Mar.) annual rate, billions	\$419.9	\$413.3r	4.5
12 LEADING INDICATORS COMPOSITE (Mar.) index	147.9	147.6	4.5
MANUFACTURERS' INVENTORIES (Mar.) billions	\$372.9	\$372.8r	-3.4
MANUFACTURING SHIPMENTS (Mar.) billions	\$243.9	\$241.7	6.6

Sources: Census Bureau, Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/20)	\$945.7	\$939.8r	12.4
BANKS' BUSINESS LOANS (4/22)	287.0	288.4i	-10.4
FREE RESERVES (4/29)	1,009	1,033r	-4.5
NONFINANCIAL COMMERCIAL PAPER (4/22)	145.1	145.4	-4.4

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (5/5)	3.77%	3.50%	5.79%
PRIME (5/6)	6.50	6.50	8.50
COMMERCIAL PAPER 3-MONTH (5/5)	3.93	3.96	5.92
CERTIFICATES OF DEPOSIT 3-MONTH (5/6)	3.84	3.91	5.91
EURODOLLAR 3-MONTH (5/2)	3.95	4.04	5.98

Sources: Federal Reserve Board, First Boston

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/6)	132	134	139
GERMAN MARK (5/6)	1.63	1.66	1.73
BRITISH POUND (5/6)	1.79	1.77	1.72
FRENCH FRANC (5/6)	5.50	5.58	5.86
CANADIAN DOLLAR (5/6)	1.20	1.19	1.15
SWISS FRANC (5/6)	1.50	1.52	1.47
MEXICAN PESO (5/6) ¹	3,065	3,066	2,997

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/6) \$/troy oz	336.700	335.700	-5.7
STEEL SCRAP (5/5) #1 heavy, \$/ton	94.00	92.00	-1.1
FOODSTUFFS (5/4) index, 1967=100	203.3	199.9	-1.0
COPPER (5/2) ¢/lb.	103.8	103.7	-6.7
ALUMINUM (5/2) ¢/lb.	60.5	62.3	-2.3
WHEAT (5/2) #2 hard, \$/bu.	3.92	4.10	32.9
COTTON (5/2) strict low middling 1-1/16 in., ¢/lb.	56.53	54.27	-31.0

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market.

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

Skylark A new form of street art for 1992.

With anti-lock brakes standard equipment, it's a new form of street-smart, too.

in Skylark's class. And the new Skylark comes with GM's ABS VI, the anti-lock brake system that's standard on every new Skylark. *Automobile Magazine* named it 1992's Technology of the Year.

3300 V6 turns driving into an art.

Quality

Every Skylark comes with the one feature no other car in its class can offer—Buick quality. And it is backed by a 3-year/36,000-mile Bumper to Bumper Plus Warranty.†

Control

An Adjustable Ride Control system* lets you select a soft, sport or automatic suspension setting. The power of Skylark's Quad OHC engine or the available



For more information on Skylark, call 1-800-435-5552, or better yet, test-drive one on a stretch of road in your neighborhood.

Safety

You'd have to pay up to \$1,000 extra for anti-lock brakes on most imports

Skylark is a registered trademark of GM Corp.
©1992 GM Corp. All rights reserved.
Buckle up, America!

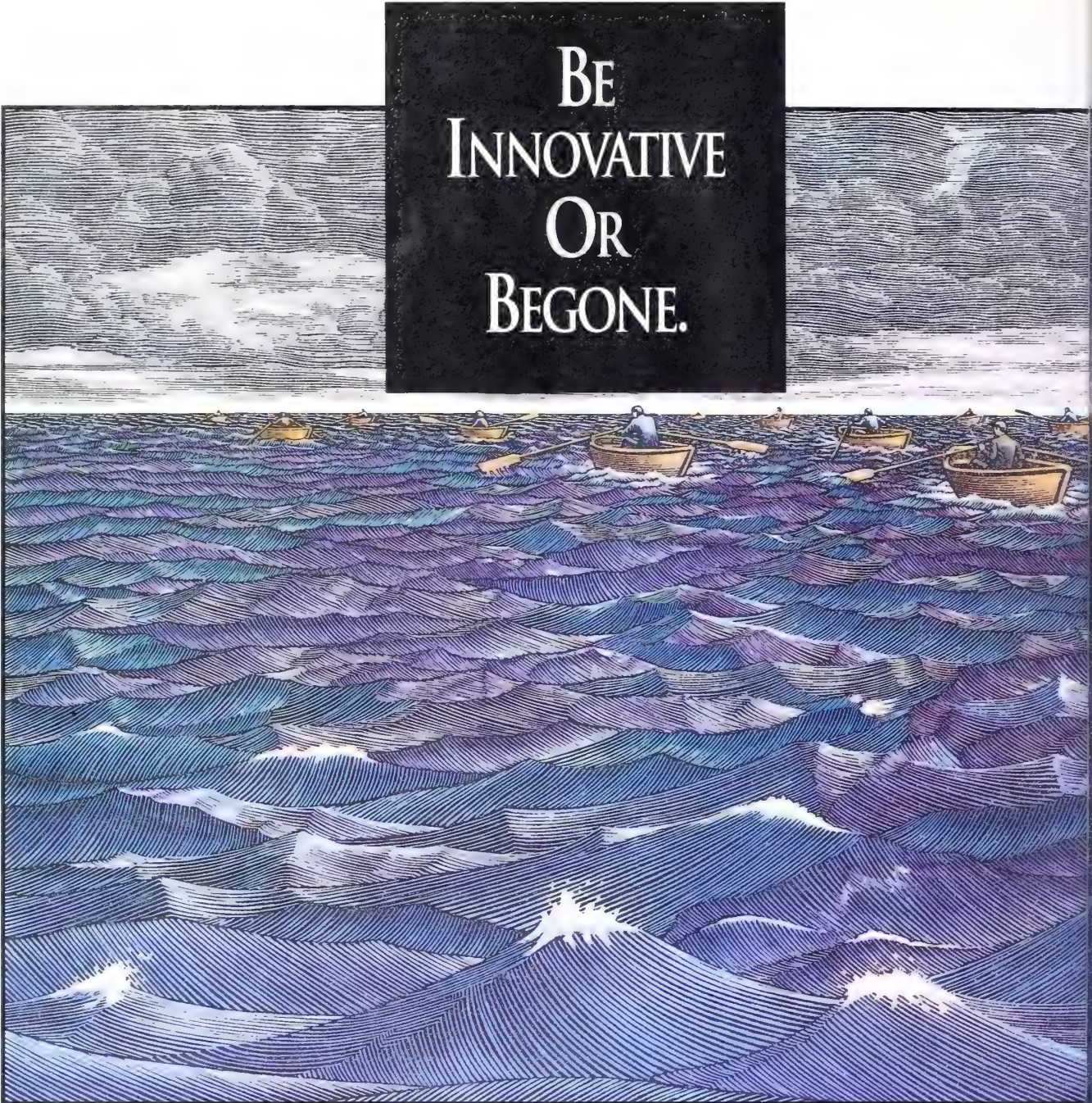


*Standard on Skylark GS
†See your dealer for terms of this limited warranty



BUICK

The New Symbol For Quality In America.



BE
INNOVATIVE
OR
BEGONE.

It's a challenge to the competition and a work ethic here at Chemical Banking Corporation.

It pledges: be effective enough to make yourself indispensable to your customer; anticipate trends that benefit your customer; create products and services that are fresh and new.

It says don't take relationships for granted, an important credo because we're first on so many fronts: first in primary relationships with U.S. corporations, first in loan syndication worldwide and first in serving middle market companies, for example.

At Chemical the raw materials of innovation are capital

 **CHEMICAL**



strength combined with intellectual currency.

A recent equity offering—the largest ever for a U.S. commercial bank—added more than \$1.5 billion to our already strong capital base. And we intend to continue building it.

Intellectual currency is the intelligence, ingenuity, drive and

knowledge our people use to meet clients' financial needs.

We use intellectual currency and capital strength to innovate across all markets and all functions. If you are a customer of ours, or if you become one, hold us to our pledge. We'll help you innovate so you can leave your competition in your wake.

INTELLECTUAL CURRENCY. CAPITAL STRENGTH.™

EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: John A. Dierdorff
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Robert J. Dowling, Mark Morrison, G. David Wallace
ART DIRECTOR: Malcolm Frouman
SENIOR EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, Judith H. Dobrzynski, Marc Frons, Geoff Lewis, Ciro Scotti, Mark N. Varnos, Lee Walczak (Washington), Chris Welles, Seymour Zucker
EDITORIAL PAGE EDITOR: John E. Pluenneke
CHIEF OF CORRESPONDENTS: Keith G. Felcyn
INTERNATIONAL EDITION: William J. Holstein (Editor), Elizabeth Weiner (Sr. Editor)
SENIOR WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis (Chicago), William Glassall, Gene G. Marcial, Bruce Nussbaum, John Pearson, Karen Pennar, Otis Port
ASSOCIATE EDITORS: Duane E. Anderson, Deirdre A. Depke, Amy Dunkin, Peter Finch, Jeffrey M. Laderman, William D. Marbach
DIRECTOR EDITORIAL OPERATIONS: Thomas J. Reed
PICTURE EDITOR: Lawrence Lippmann
SENIOR ART DIRECTOR: Laura Baer
DIRECTOR OF SYSTEMS: Claire Conte Worley
ECONOMICS: James C. Cooper (Sr. Economist/Business Outlook editor), Kathleen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel (Assoc. Economics editors), Gene Koretz (Economic Trends editor)
DEPARTMENT EDITORS: Books: Denise Demong Corporate Finance: Larry Light Industries: Thane Peterson Information Processing: John W. Verity International Edition: Joyce Barnathan International News: Peter Galuszka, Stanley Reed Investment Banking: Leah Nathans Spiro Legal Affairs: Michele Galen Marketing: Christopher Power, Mark Landler (Assoc.) Markets & Investments: Gary Weiss Money & Banking: John Meehan News: Harms Collingwood People: Michael Oneal Personal Business: Donald H. Dunn, Joan Warner Science: Emily T. Smith Scoreboards: Fred F. Jespersen Social Issues: Troy Segal Technology: Robert Buder Telecommunications: Peter Coy Transportation: Andrea Rothman The Workplace: Aaron Bernstein
STAFF EDITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill II, Suzanne Woolley, Laura Zinn Paul M. Eng (Asst. editor)
COPY EDITORS: Harry Maurer (Deputy chief), Prudence Crowther, Michael Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack Robbins, Jim Taib (Sr. copy editors), Pam Black, Carl Desens, Hardy Green, Aleta Kaufman, Cynthia McLean, David Pengilly, Malka Percal, Doug Royalty, Gail Fowler, Dalia Kandioli, Aida Rosano, Eva Stettner (Researchers)
PRODUCTION COPY EDITORS: Donald Halsband (Chief), Hallberg Hallundsson, Celine Keating, Robert S. Norman, Lawrence Bark, Stephan M. Romanoff
ART: Steven Taylor (Deputy director), Cynthia Friedman, Francesca Messina, Jay Petrow (Assoc. directors), Alice Cheung, Craig Soa (Asst. directors) Graphics: Arthur Eves (Director), Joan Danaher (Deputy director), Rob Doyle (Sr. Illustrator), Laurel Damsis, Alberto Mena, Ray Vella (Illustrators), Jaime Beauchamp (Computer artist) Production: Stephen J. Romeo (Mgr.)
PHOTOS: Sue Bloom (Deputy Picture editor), Todd James, Scott Mlyn, Ronnie Weil (Assoc. Picture editors), Anne Murray (Asst. editor) Kathleen Daly (Researcher) Bettina Baudoin (Researcher - Pans) John Clark (Traffic), Lawrence Crowe (Librarian)
EDITORIAL OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne Rodriguez (Production managers) Thomas R. Dowd, Sharon L. Eng, Ediel Lee, Jose L. Martin, Jane M. Parkinson, Craig Sturges, Karen Turk, Ilse V. Walton, Nicholas White (Makeup editors), Dale I. Arnold, Felix Lindicy, Edgardo Torres (Asst. makeup editors) Donald C. Pearson (Traffic manager), Bruce M. Arnold, Leo Corbie (Production artist)
CORRESPONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walencia Konrad Boston: Gary McWilliams, Geoffrey Smith Chicago: David Griesing (Deputy Mgr.), Julia Flynn, Kevin Kelly, Lois Thernen Cleveland: Zachary Schiller (Mgr.) Connecticut: Lisa Dnscol Dallas: Wendy Zellner (Mgr.) Stephanie Anderson Forest Detroit: James B. Treese (Mgr.) David Woodruff Los Angeles: Ronald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), Kathleen Kerwin, Eric Schine Miami: Gail DeGeorge (Mgr.) Philadelphia: Joseph Weber (Mgr.) Pittsburgh: Michael Schroeder (Mgr.), Maria Mallory San Francisco: Russell Mitchell (Mgr.) Seattle: Brandt, Joan O'C Hamilton, Robert Hill, Kathy Rebellio, Seattle: Don Jones Yang (Mgr.) Washington: Stephen H. Widstrom (Sr. News Editor), Stan Crook (News Editor), Amy Borus, Brian Bremner, John Carey, Paula Dwyer, Dean Foust, Susan B. Garland, Howard Gleckman, Douglas Harbrecht, Peter Hong, Mark Lewyn, Paul Magnusson, Mike McNamee, Tim Smart, Catherine Yang Christina Del Valle (Asst. editor) Bonn: John Templeman (Mgr.) Gail Schares Hong Kong: Pete Engardio London: Richard A. Melcher (Mgr.) Mark Maremont Mexico City: Stephen Baker (Mgr.) Moscow: Rose Brady (Mgr.) Paris: Stewart Toy (Mgr.), Bill Javetski, Jonathan B. Levine Rome: John Rossant (Mgr.) Tokyo: Robert Neff (Mgr.) Neil Gross, Ted Holden, Karen Lowry Miller Toronto: William C. Symonds (Mgr.)
EDITORIAL SERVICES: Broadcasting: Ray Hoffman Business Manager: Barbara Boynton Information Services: Jude T. Hayes (Director), Judi Crowe (Asst. editor), Fred Katzenberg, Elsa S. F. Xualto, Soong Office Manager: Roselynn Kopf Public Relations: Christine Summerson Josephine Coppola Readers Report: Zenobia Brown Reprint Permission: Lawrence Clayton Systems: Ina L. Kichen (Mgr.), Ron Barker, Courtenay Eddy
PUBLISHER: John W. Patten
Sr. VP, OPERATIONS: Gary B. Hopkins
Sr. VP, ADVERTISING SALES: Karl A. Spangenberg
VP, INTERNATIONAL: Gerd Hinske
VP, CIRCULATION: Kitty Carroll Williams
VP, DIRECTOR OF MARKETING: Cara Erickson
VPS, SALES: Constance E. Bennett (San Francisco), G. Jarvis Coffin III (Atlantic Region), Dan Dunn (Chicago), Molly F. Ford (Northeastern Region)
CONTROLLER: Gary M. Singer
DIRECTOR, ADVERTISING BUSINESS: Linda F. Carvalho
DIRECTOR, PRODUCTION: Mano J. Talluto

THE CASE FOR REFORMING AMERICA'S LEGAL SYSTEM

Your story "Guilty!" (Cover Story, Apr. 13), on alternative methods of resolving legal disputes, was important, timely, and, for the most part, accurate.

While alternative dispute resolution should always be considered before resorting to the courts, product-liability issues shouldn't be given short shrift. Litigation and potential punitive damages force manufacturers of dangerous products to make them safer or take them off the market. You report that "a striking 83% of executives polled say the fear of lawsuits has more impact on decision-making within their company than it did 10 years ago." This is good news.

Secondly, even the great [Scott] Turow should think again before suggesting that discovery should be "cut out" from U.S. lawsuits. Discovery is a means of getting facts on the table and avoiding "trial by ambush." Discovery often leads to pretrial settlement. So, while discovery should perhaps be limited, it should not be wholly discarded.

Paul J. Geller
Decatur, Ga.

Guilty are American businesses that use legal resources to turn a fast buck without doing "good for society." There is a utilization, not supply, problem of lawyers.

Michael Manoussos
Southfield, Mich.

Your article hits the problem but misses the solution.

By the time a legal problem has become a dispute, it is already too expensive. The answer lies not in cost-cutting by house counsel, or even well-intentioned alternative dispute resolution. There are better solutions than those comparable to the proverbial "locking the barn door after the horse has escaped." Preventive law, which antici-

pates the problems by such techniques as legal audits and compliance programs, is now the method of choice.

Leon M. Cooper
Cooper & Dempsey
Los Angeles

The most remarkable of the few unslanted statements I gleaned from your article on lawyers are those regarding nonlawyer legal experts practicing in Japan in the areas of corporate, tax, and general law. In my 10-lawyer firm, only three attorneys are litigators (who, incidentally, do not waste their or the courts' time or our clients' money on frivolous suits). The rest of us spend our time advising corporate clients, giving tax advice, drafting legal instruments, and giving legal advice on such matters as wills and estates, real estate transactions, and the like. When you compare apples with apples, Japan sounds a hell of a lot like the U.S.

Douglas O. Thigpen
McGuire, Wood
& Bissette P. A.
Asheville, N. C.



We would be better served by single or odd-numbered judicial panels hearing civil suits than the cumbersome and questionable value of jury participation.

Warren A. Furst
Barrington Hills, Ill.

In the 37 years we have been in business, I remember only one instance where we had to sue another company and that was settled before it went to court. However, we constantly have to ward off attacks by the various governmental agencies on equal employment and tax issues. They seem to have the attitude that they can attack at will and make it so expensive to fight that you will settle even though you know you're in the right. There are times when it works. As much as it goes against the grain, I will, at times, pay a \$15,000 tax adjustment when I know I'm right, to save the \$30,000 it would cost to fight it. This is exacerbated by the complex

BUSINESS WEEK
MAY 18, 1992 ***3266
ISSN 0007-7135



Published weekly, except for one issue in January, by McGraw-Hill, Inc. Founder James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone (212) 512-2000 Domestic Telex 127960; International Telex 232365, Cable McGraw-Hill New York, TWX 710-581-4879. U.S. subscription rate \$44.95 per year, 2 years, \$74.95, 3 years, \$99.95. Single copies, \$2.75. Write for rates in other countries. Business Week Subscription Services 1-800-635-1200.

PHOTOCOPY PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN 0007-7135/92/\$2.75

European Circulation: Letter McGraw-Hill, House, Maidenhead, Berkshire, England. Telephone: 01628 23431. Telex: 84060. Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 420, Hightstown, N.J. 08520. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9010. Registered for GST as McGraw-Hill Inc. GST #R123075673. Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Dionne, Chairman, President, and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Penglas, Senior Vice President, Treasury Operations.

You're Carrying 4 Tons Of Explosives And People Are Shooting At You.

No problem. You're in an F/A-18 Hornet.

In Operation Desert Storm, two McDonnell Douglas F/A-18s were able to engage and shoot down two enemy MiGs, even while loaded

down with several tons of bombs and missiles. Then the

F/A-18 pilots

went

on to

complete their

real mission: Bombing an

Iraqi airfield. The F/A-18 Hornet is just

one in a long line of McDonnell Douglas success stories—from the dependable Delta Rocket to the fearsome Apache. It's this record of proven performers that has made us a world leader in aerospace technology.

MCDONNELL DOUGLAS

Performance Above And Beyond.

© 1992 McDonnell Douglas Corporation



It's no different
than your
office back
in Chicago.
You have
a window,
a phone,
a desk and
a computer with a
25MHz, 486SX
microprocessor,
120 MB hard drive
and TFT color.
Actually,
maybe this office
is better.
The bed vibrates.



© 1994 Dell Computer Corporation. All rights reserved.



When you dedicate yourself to making portable computers, you start to realize how far they can actually go.

In Touch with Tomorrow
TOSHIBA

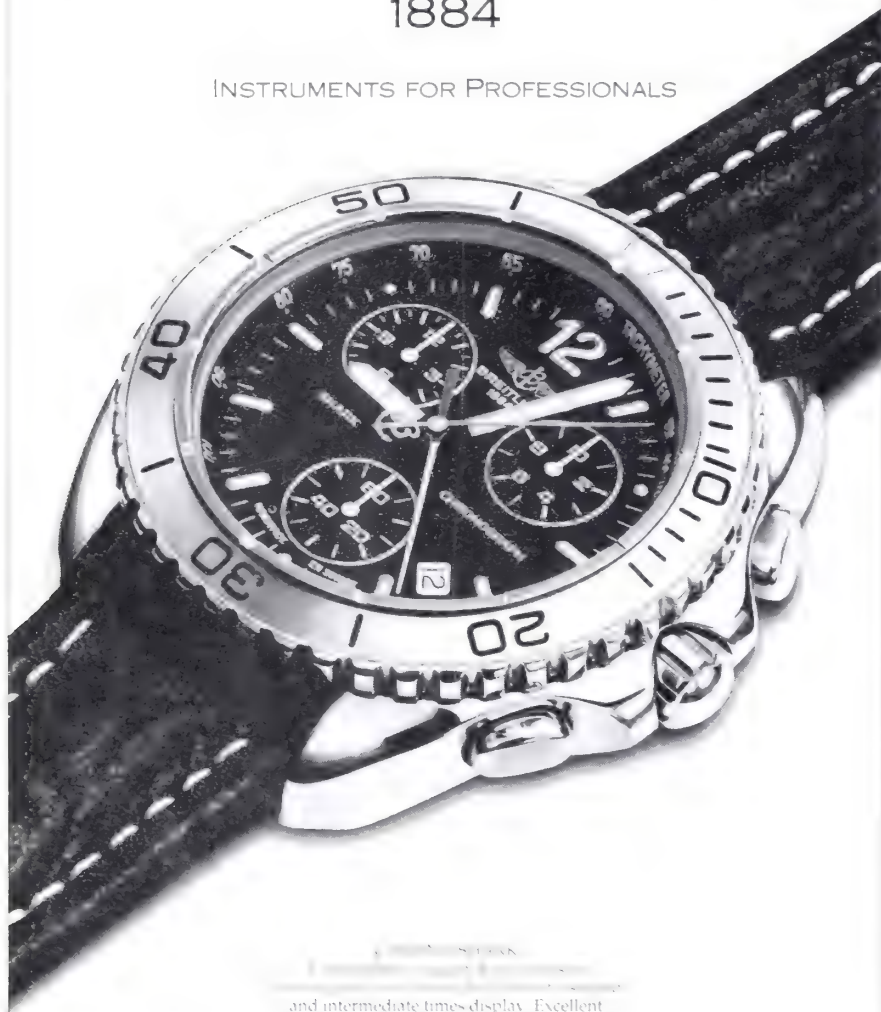
FOR MORE INFORMATION, CALL 1-800-4-A-TOSHIBA © 1992 Toshiba America Electronic Components, Inc.



BREITLING

1884

INSTRUMENTS FOR PROFESSIONALS



and intermediate times display. Excellent

Screw-locked crown. Water-resistant down to

GREG

JEWELERS

10921 Weyburn Ave.
LOS ANGELES, CA 90024
(213) 824-3738

Readers Report

ities of the various tax laws that require legal interpretation and protection. The list of them would go on for pages. We could eliminate more than half the lawyers in the country if our legislators would simplify and then stop tinkering with the tax laws.

Arnold Miller
Treasurer
Quill Corporation
Lincolnshire, IL

The story misses the point on mediation when it calls for proceedings to be opened to the public and the press. When parties to a dispute voluntarily seek to resolve it through mediation and enlist the help of a trained, neutral third party (the mediator), neither the public nor the press has any business to participate as Big Brother.

Ernest A. Cohen
President
Lawyers Mediation Service Corporation
Tucson, AZ

Any court of law would sustain an objection to "leading the witness. Why can't we object to "leading the witness"? The disgusting television and radio ads, in addition to billboards with 800 numbers, amount to blatant solicitation. I know one thing, Will Rogers never met any personal-injury lawyers.

Joel Cavazos
Kingsville, Texas

Traditionally, Big Business has been wedded to big law firms. In almost every area of the practice of law, and especially in the area of litigation, there are [midsize] law firms providing excellent services at very competitive rates.

Not long ago, business' response was to stall or "string out" for years to wear out the plaintiff, regardless of cost. Only recently has business decided that a better and less expensive strategy is to get to the bottom of the problem and resolve it. If a lawyer has the cooperation of his or her client to obtain the client's side of the issues quickly after suit is filed, the lawyer can analyze a case, determine the issues, and the risk of liability. If a business wants its case moved through the courts and resolved quickly, often the lawyer can do that. Lawyer-bashing is popular, but remember: We follow the directions of our clients.

Jack N. Sibley
Freeman & Hawkins
Atlanta, GA

When (not if) the second revolution comes to the U.S., it will not be because of race or recession, gangs or greed, economy or environment. It will

ome when the people finally decide to
ike back their Constitution from the
gal rat pack.

John T. Burrige
North Las Vegas, Nev.

So Motorola would rather mediate
than go to court? I am a member of
ie political organization Citizens Advo-
ting the Protection of Privacy. When
otorola implemented their random,
ithout cause, drug-testing program,
y organization attempted to protest by
istributing literature in the company
eteria during lunch hour. In spite of
nsecutive National Labor Relations
ard rulings in our favor, Motorola has
ppealed to a federal court and contin-
es to prohibit us from distributing liter-
ure. I think Motorola decides to med-
e only when a possibility exists for a
rge financial loss, not out of any idea
' fairness.

Jody Everett
Austin, Tex.

It is interesting to know that Alan
Dershowitz' passions are inflamed. It
ould be more interesting to know what
p he places on the legal fees he
arges clients. It would also be inter-
ting to know the amounts, not the per-
ntages, that he has kept for himself
id given to "people who really do good
r society."

Perhaps if he were not so heavily in-
lved in the effort to obtain reversals
r convicted criminals, he might realize
ere are also lawyers who do good.

Robert W. Ellis
Houston

There is merit in your feature, but
Alan Dershowitz' comments cannot
ss without comment. I'm sure he de-
nded Claus von Bulow and represents
ike Tyson on an hourly basis reflecting
e top of the Boston rate, but I could be
rong. And, for his enlightenment, may
add that all lawyers, regardless of in-
me, do "take some of what [they] get
id give that to elementary school
achers, nurses, health workers, people
ho really do good for society" through
method called taxation. If the money
ey give in this manner is inadequate
r the identified segments, it is not the
ult of the lawyers. Perhaps Dersh-
vitz, with all his brains and clout, can
me up with some fix.

Jon R. Kerian
District Judge
North Dakota District Court
Minot, N. D.

Letters to the Editor should be sent to Readers
port, Business Week, 1221 Avenue of the Ameri-
s, New York, N. Y. 10020. Fax: (212) 512-4464,
lex: 12-7960, Intl. 4998204. All letters must in-
ide an address and daytime and evening tele-
one numbers. We reserve the right to edit letters
clarity and space.

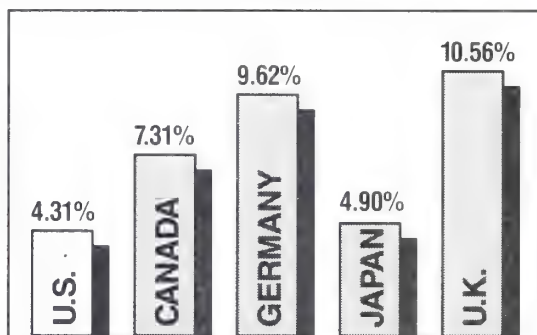
NEW AND NO LOAD FROM FIDELITY

How to Take Advantage of High Global Yields

Fidelity Short-Term World Income Fund

High Yields From Around The World

Fidelity Short-Term World Income Fund offers investors an opportunity to enjoy the significantly higher yields currently available from many short-term international securities. That's good news if you're investing for income.



Today, short-term rates in many foreign countries are higher than in the U.S. This chart compares three-month Eurodeposit CD rates as of 3/17/92. Rates are not intended to reflect the yield or investments of the Fund. Source: Reuters.

Managed For High Stability

The Fund pursues a high level of price stability by investing primarily in short-term securities and using hedging techniques to help reduce the impact of changing currency rates. Of course, the Fund's share price, yield and return will vary, and you may have a gain or loss when you sell shares.

Fidelity Makes It Easy To Invest

You can even use the proceeds from your maturing CD to open an account.¹ And, it's easy to open an IRA or transfer an existing one. Just call us and we'll assist you. Minimum investment: \$2,500, plus free checkwriting.

Visit Your Local Investor Center or Call 24 Hours
1-800-544-8888



2r

CODE: BW/SWI/051892

For more complete information, including management fees and expenses, call today for a free prospectus. Read it carefully before you invest or send money. ¹Unlike many CDs, the Fund is not FDIC-insured. Fidelity Distributors Corporation, 82 Devonshire Street, Boston, MA 02109

Sable Presents S



1 DUAL AIR BAGS

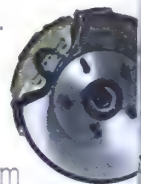
This year's Mercury Sable offers both a driver and optional right front passenger air bag Supplemental Restraint System—a feature not offered by any other manufacturer in this class. (Manufactured by Ford Motor Co. Remember to always wear your



safety belt even though your vehicle is equipped with air bags.

2 ANTI-LOCK BRAKES

A safe driver is a driver in control. Even when braking on ice, snow or rain-slick roads. Sable's available 4-wheel disc anti-lock braking system helps keep the driver in control regardless of road conditions.



Safety in Numbers



CRUMPLE ZONES TO ABSORB IMPACT

At either end of Sable, crumple zones help absorb the brunt of impact before it reaches the passenger compartment.



4 CHILD-PROOF REAR DOOR LOCKS

If you're driving with young children, you'll be pleased to know Sable is equipped with child-proof door locks. A flick of a switch and the rear doors cannot be opened from the inside.

These are just a few of the safety features built into the Mercury Sable for 1992. Features that aptly support the old adage, "There is safety in numbers."

1 800 446-8888

 **MERCURY SABLE**

JUST WHAT DOES PEROT STAND FOR?

BY PAUL CRAIG ROBERTS



Does he really plan sweeping reforms, such as direct referendums, which would return power that Washington has expropriated from the people? If not, a Perot Presidency would be just more of the same

The electorate has made it clear in opinion-poll results that it doesn't think much of the probable Presidential candidates. In a CBS-*New York Times* survey on Apr. 27, only 35% of the respondents viewed President George Bush favorably, while 44% viewed him unfavorably. The leading Democratic contender, Governor Bill Clinton of Arkansas, fared even worse, with a 26% favorable and 40% unfavorable rating. In contrast, respondents viewed potential write-in candidate H. Ross Perot favorably by a margin of more than two to one.

Voters seem to be saying that they want more change than either party is prepared to give them. As has often been observed, politics serves narrow, organized interests very well and everyone else very badly. Moreover, both parties remain committed to the 20th century's romance with Big Government. Is Perot the leader who will be able to enact broad, sweeping reforms and curtail the size and power of government?

If he really is that leader, he needs to define himself before the media do it for him. Already, *The New York Times* is running headlines that make him virtually indistinguishable from other candidates: "Wealthy Should Pay More To Trim Deficit, Perot Says." If he really thinks the deficit is the problem and that taxing the rich can solve it, Perot adds nothing to our alternatives.

PEOPLE POWER? Perot says he will lay out his program by midsummer, but he doesn't have that long. By then, the media will have made of him what they will. Moreover, it is not credible to expect a grass-roots effort to put him on the ballot in 50 states—when people don't know where he plans to take them and how he intends to get them there. His promise of "action, action, action" is not only skimpy but also unencumbered by any details: He has not even identified which track he wants "to get this country back on."

Perot can coast a limited distance on the public's attitude that anyone would be better than Bush or Clinton, but after that he has to go to work and produce a checklist that differentiates him from the official candidates. When he criticizes government for its inefficiency, does he mean it needs a problem-solver to take its management in hand or an ax-wielder to prune it radically? The distinction is important. One approach continues with things as they are, and the other increases private empowerment and responsibility.

Perot's problem-solving rhetoric suggests that he doesn't understand the problem. Budget Director Richard G. Darman can "get everyone in the same room" in order to solve

problems—only it's their problems and not ours that get solved. One politician needs to project a smaller deficit, another needs more pork for his constituency, and they work it out over a tax increase.

On the other hand, Perot does seem to favor referendums and initiatives, measures that would strip Washington, and perhaps the courts, of power expropriated from the people. A President backed with people power doesn't have to worry about getting along with Congress, lobbyists, and the bureaucracy. If this is what Perot has in mind, he should tell us, because it is a revolutionary's way of dealing with corrupt government. Considering the mood of the electorate, it would give his candidacy a tremendous boost.

SUCCESS QUOTIENT. On economic policy, he needs to make it clear whether he is just another national industrial meddler like Felix Rohatyn or a champion of the opportunity society that allowed him to become rich. If he doesn't appreciate his own success, he won't mind curtailing success for the rest of us. When he calls for "fairness in taxation," it matters a great deal whether he means allowing success to reap its reward or forcing the successful to shoulder the burdens imposed by organized lobbies in the name of fairness. He has nothing new to offer if he is simply another guilt-ridden rich man who will raise taxes on above-average incomes in order to help the deserving.

Perot should tell us how he intends to control government spending. When he says, "someone like me doesn't need medicare," it implies he thinks he can balance the budget by cutting the wealthiest Americans off the entitlement list.

Perot could make himself a real candidate by defining the characteristics of a successful society, specifying where we fall short and identifying the measures he would implement to raise our success quotient. If he backs an economic growth agenda instead of more redistribution and calls for a scaled-down government and not simply a better-managed one, he could be the first write-in candidate to become President.

When the history of the 20th century comes to be written, it will be the story of how the growth of government crowded out private life, and even the family itself. This process, however, is now in reverse in Sweden, France, Britain, Eastern Europe, the republics of the dissolved Soviet Union, Latin America, and even in China. If Perot's candidacy is for real, he will tell us that we must be part of this historic transformation and not become the world's reactionary.

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

The Guardian Life Insurance Company of America

A+

A.M. Best's Highest Rating

AAA

Standard & Poor's Highest Rating

Aaa

Moody's Highest Rating

The Guardian's Report Card: Straight A's

Despite these financially troubled times, The Guardian is making the grade by earning the highest marks for fiscal strength from each of the leading independent financial rating services. A+ from A.M. Best. AAA from Standard & Poor's. And Aaa from Moody's. In fact, only eight companies in the United States are on the honor roll of all three rating services. And two of the eight companies are part of The Guardian family.

No. 1 In Our Class

The Guardian has also achieved top scores from Financial World magazine. They took a tough look at the insurance industry and ranked the 42 U.S.-based life and health insurance companies with assets of \$5 billion or more. They focused on claims-paying ability as well as the customary statutory financial ratios. The Guardian was rated at the head of the class as the No. 1 insurance company in the United States.

Our Hard Work Pays Dividends

We've done our homework every day for 132 years. It's how we've kept our financial house in order through good economies and bad. And all of our hard work is continuing to pay off in tangible policyholder benefits, like our impressive dividends. This year, The Guardian distributed the highest dividend in its history — continuing an unbroken record since 1860.

Put Us To The Test

Take this quick quiz: Does your insurance company consistently receive the highest marks from the major rating services? Is the Life, Disability or Group policy you bought five years ago living up to its promises? Is the variable annuity you bought performing up to your expectations? If the answer to any one of these questions is no, put The Guardian to the test.

Call 1-800-662-1006.

You'll learn more about the financial strength of The Guardian. And more about our superior products and services for Life Insurance, Group Insurance, Reinsurance, Disability Income Protection, Equity Products, or Asset Management.*



The Guardian®

The Intelligent Choice™
S i n c e 1 8 6 0

* Equity products are offered through Guardian Investor Services Corporation®, a wholly-owned subsidiary of The Guardian Life Insurance Company.



The affordable power so



Today's user-friendly software demands a lot of power to really be friendly. And now you can give it the Intel486™ power it needs for a friendly price.

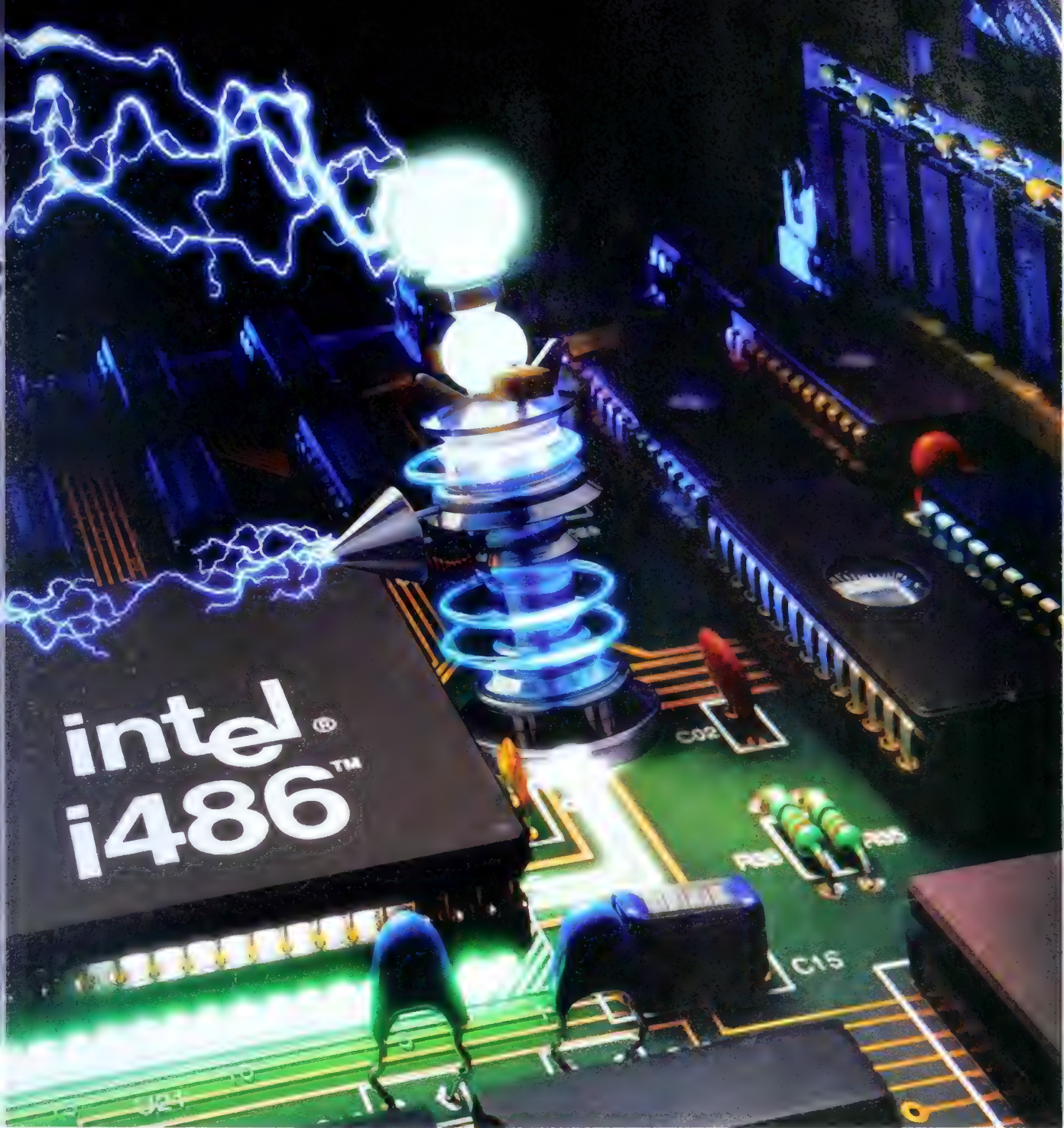
With an Intel486 microprocessor inside, you can take full advantage of today's graphical software. In fact,



where other systems get bogged down like running multiple Windows® applications simultaneously, the Intel486 CPU powers through these kinds of challenging operations easily.

Plus, the Intel486 CPU will keep

Intel486, i486, i386 and the Intel Inside logo are trademarks of Intel Corporation. ©1992 Intel Corporation. The chart is Byte Magazine's Excel 3.0 for Windows benchmark.
*All product names are trademarks of their respective manufacturers.



Power for today's software.

generating the power you need beyond today. Because the next generation of operating system software—like Windows NT*, OS/2*, Solaris* and NextStep/486*—also needs the power of the i486 CPU.

Ready to get the most out of your windowing software? Then call (800) 228-4549 for a free brochure on the

new standard in desktop computing—the Intel486 family. And plug your software into a real power source.

intel®

The Computer Inside.™

Economic Trends

BY GENE KORETZ

CORPORATE AMERICA'S CASCADE OF PINK SLIPS ISN'T OVER YET

Labor-market observers have recently been applauding a visible decline in the number of permanent staff cuts announced by major U.S. companies. But Dan Lacy, editor of the newsletter *Workplace Trends*, which tracks such announcements, is skeptical.

Lacy concedes that the number of cuts announced last quarter was about half of the 221,000 unveiled in 1991's fourth quarter. But he notes that the first-quarter tally was virtually identical to the number announced in 1991's first quarter. "Until we see a significant decline on a year-to-year basis," he says, "it's premature to conclude that the downsizing trend is losing steam."

WOULD THE ECONOMY GAIN FROM SPREADING INHERITED WEALTH?

The widespread belief that the rich grew richer in the past decade has received dramatic confirmation in a newly released study by government researchers. The study estimates that the top 1% of families—totaling less than a million households—increased their share of the nation's total private wealth by a startling five percentage points in just six years, from 31.3% in 1983 to 36.2% in 1989. Indeed, by the end of the decade, their net worth of \$6.14 trillion was almost a fifth higher than the entire net worth of the bottom 90% of families.

While these statistics received wide media coverage, the real news is that the shift in wealth was even more narrowly focused. The new study, by Arthur B. Kennickell of the Federal Reserve and R. Louise Woodbum of the Internal Revenue Service, indicates that despite appreciable gains in net worth, the bottom half of the top 1% of families actually suffered a slight decline in their share of private wealth from 1983 to 1989. In contrast, the share of the top 0.5% of families rose sharply (chart)—accounting for all the increased concentration of wealth in recent years.

That's not all. Although the new study does not analyze wealth shifts within the top 0.5% of families, economist Sidney L. Carroll of the University of Tennessee in Knoxville believes that even within this select group, the big gains were posted by relatively few

people. "It's those at the very top of the top 1%—people with wealth in the tens and hundreds of millions of dollars—whose fortunes seem to have soared in the 1980s."

The key issue, though, is the impact of concentrated wealth on the economy. Carroll notes that such wealth tends to be passed on from generation to generation via trusts. "Whereas perhaps half of today's fortunes were created explosively by visionary entrepreneurs like Sam Walton or Bill Gates," he says, "the rest



are mainly inherited wealth that has been invested conservatively."

The problem for the economy, says Carroll, lies not in first-generation fortunes, which are the result of inventive, risk-taking activities, but in inherited wealth. Recipients of massive inheritances, he observes, have little incentive to engage in the kind of creative entrepreneurship that built their family fortunes. Rather, he says, "the evidence suggests that people receiving windfalls through inheritances tend to reduce their labor force participation."

The solution, Carroll believes, is to develop a more economically productive way of taxing the transference of wealth. In a new book, *How Rich Is Too Rich?*, he and fellow author Herbert Inhaber suggest moving from estate taxation to inheritance taxation. Under their plan, taxes would no longer be levied on estates but on individual inheritances. Any individual could receive an inheritance of \$1 million tax-free but would have to pay rising taxes on additional gifts and bequests so that the lifetime total would not exceed \$2.5 million.

This scheme, argues Carroll, would hardly interfere with newly created wealth. Indeed, by spreading moderate wealth more widely, it would create incentives among young recipients to build their own fortunes. And over time, it

would lessen the trend toward greater concentration resulting from perpetuated fortunes—a trend that stirs resentment among the great majority of Americans who were not born wealthy.

Although shifting to inheritance taxation would face resistance from the very wealthy, Carroll believes it would find favor among the moderately wealthy who would actually be able to pass on more of their wealth on a tax-free basis. "Transferring more wealth to a broader-based crew of energetic, educated young people," he says, "could have a profoundly different effect on the economy than the many millions locked away in bequests to support the very rich."

WOMEN IN THE WORKPLACE: MEN ARE ALL SHOOK UP

Sexual integration of the workplace may be a lot harder on men than it is on women. According to research described in the newsletter *Work in America*, management professor Anne S. Tsui of the University of California at Irvine found that men in all-male work environments show the strongest commitment to their jobs, and their commitment declines as the percentage of women in their work groups rises.

By contrast, Tsui found that women are equally committed whether they are the only woman in a group or work in a largely female unit. She speculates that many men accustomed to working in all-male groups become uncomfortable at the presence of women increases.

IT'S GETTING EASIER TO SERVICE THAT MOUNTAIN OF DEBT

Just how severe are the current debt burdens of households and businesses? Still very heavy, if one looks at such gauges as the ratio of household debt to disposable income or the ratio of corporate debt to business output. But a lot less severe if one looks at the bite debt service is taking out of current income.

Economist Joseph G. Carson of Dear Witter Reynolds Inc. estimates that net interest paid by the private sector, which hit 13.6% of national income in late 1990, fell to 12.1% in the first quarter of this year, a four-year low. "The combination of declining interest rates and record refinancing of high-fixed-rate debt," he notes, "have made it easier for everyone to service debt—a development that bodes well for the upturn."



After taking the plunge in the cool water the city's pulse slowed and I began to unwind. Escaping to a rooftop pool in the very centre of New York was not what I had in mind when I had arrived. But the experience was one that could only be described to the uninitiated as swimming over Manhattan.



SHARE THE EXPERIENCE



**Politicians
Try To Stimulate
Investment Every
Election Year.
We Try Every Day.**

Every four years both political parties proclaim that they have the program that will fuel the growth of our economy. A program that generally proves more effective in soliciting votes than in improving economic conditions.

For 84 years The CIT Group has had a program that has helped to stimulate the economy every day. We call it Asset-Based Lending.

Asset-Based Lending is a simple financial tool that allows you to access the equity of your assets for the capital necessary to reinvest in your business. Capital that can help your business grow, produce new or better products and services.

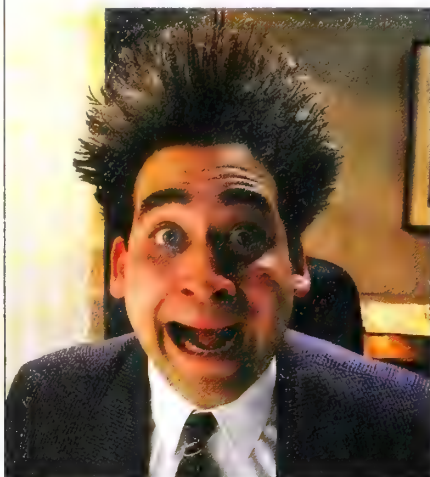
All of which has a rather stimulating effect on our economy.

As America's most experienced asset-based lender, we have a long history of making funds available to the companies who could profit by them most. Last year, we made loans and leases of over \$3 billion. This year, we plan to top \$4 billion. If you're looking for stimulating ideas, give us a call at **1-800-545-5440**.



AMERICA'S
MOST EXPERIENCED
ASSET-BASED
LENDER

I COULD HAVE GOTTEN IT FREE?



WHY PAY WHEN YOU CAN GET TODAY'S BEST PC NETWORK FREE FROM SITKA?



Yes! For a limited time you can get 2 nodes of Sitka's best-selling 10NET network, a \$198 value, free. All that's required is proof of ownership of two network interface cards. The reason

is simple. We know once you try 10NET, you'll be a customer for life.

With 10NET you get everything you've ever wanted in a network. Like the power to share files, programs and printers—and add as many users and nodes as you need. It's incredibly easy to use. And it offers full support for DOS and Windows all in one box.

So what have you got to lose? Call 1-800-795-0014 toll-free now for the name of your nearest Sitka 10NET dealer. Because getting anything else would be a waste of money.

YOU MUST ACT NOW! CALL TODAY FOR DETAILS. © 1992 Sitka Corporation. 10NET is a registered trademark of Sitka Corporation. Sitka is a registered trademark of Sitka Corporation. All other trademarks and product names are the property of their respective owners. Sitka Corporation, 950 Marina Village Parkway, Alameda, CA 94501. Sitka is a trademark of Sitka Corporation, a wholly owned subsidiary of Sun Microsystems, Inc. Sun Microsystems and the sun logo are trademarks and registered trademarks of Sun Microsystems, Inc.

1-800-795-0014



Books

TWO NATIONS

By Andrew Hacker
Scribners • 257pp • \$24.95

THE DISPOSSESSED

By Jacqueline Jones
Basic Books • 399pp • \$25

RETHINKING SOCIAL POLICY

By Christopher Jencks
Harvard • 280 pp • \$27.95

AMERICAN GRIDLOCK: THE STATE OF THE UNDERCLASS

Any discussion of poverty in the U.S. must inevitably dwell on race, given the disproportionate number of African-Americans who are poor. Surely the carnage that erupted in South-Central Los Angeles following the Apr. 29 acquittal in the Rodney King trial is an expression of rage and frustration not only at the verdict but also at the impoverishment and hopelessness of many of the rioters.

Even before L.A. exploded, poverty was back on center stage in the U.S. Over the past few years, state and local governments have been trying to reform welfare. Most have simply cut back to save money, but a few are attempting to improve the way it works. Many Americans have grown angry about worsening income inequality. Many parents, white and black, worry that their children won't enjoy the American dream. After all, one-fifth of all children—and a staggering 50% of all black children under six—are poor.

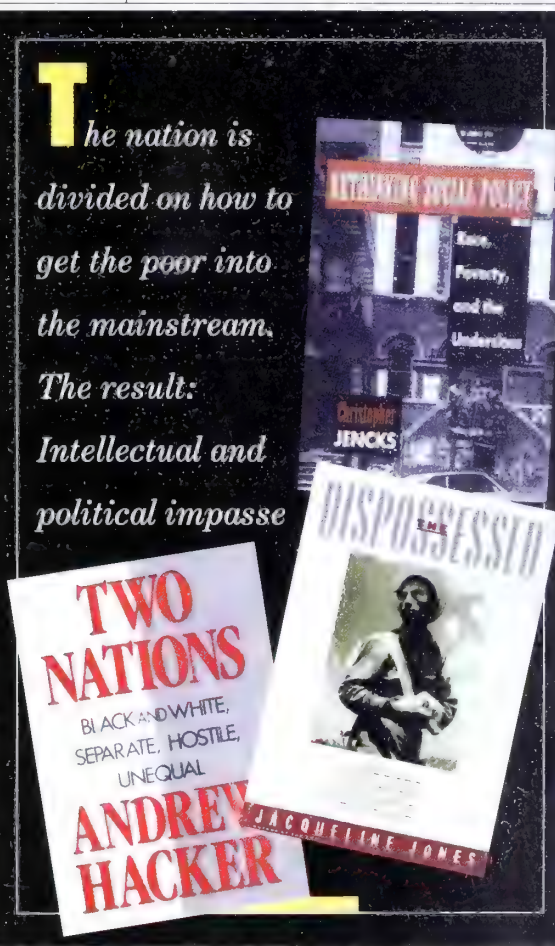
The problems are not new, of course. The Great Society programs of the 1960s were an ambitious assault on both poverty and racial barriers. But by 1980, the notion that programs intended to ameliorate poverty actually make the poor dependent on government largess had become fashionable. At the same time, Americans have become increasingly divided in their attitudes toward affirmative action. The result: intellectual and political gridlock, in which liberals blame persistent racism and entrenched poverty on government inaction even as conservatives attack government programs for sustaining a self-perpetuating underclass.

While solutions remain elusive, three worthwhile new books illuminate different aspects of race and poverty in Amer-

ica. Each tells a complicated story. One is an impassioned condemnation of American apartheid. Another offers a poignant history of the poor in the U.S. The last is a thoughtful series of essays on race and poverty that dissects the principal issues dividing liberals and conservatives.

Andrew Hacker is a political scientist at Queens College and one of the lead-

The nation is divided on how to get the poor into the mainstream. The result: Intellectual and political impasse



ing scholars of race relations in the U.S. His book's title sums up his current assessment: *Two Nations: Black and White, Separate, Hostile, and Unequal*.

Two Nations is in effect two books. The first is a well-intended but often unsatisfying attempt to understand black fears and white racism today. It is a disturbing jumble of insight, outrage and unsubstantiated assertion. The redeeming second book is a careful—and

Lufthansa announces a new way to fly that lets you mix business with pleasure.



Introducing our new Intercontinental Service.

For Business and First Class passengers, it's a level of service where your individual needs can be satisfied in utmost refinement — all within the comfort of our Boeing 747 service to Germany. In Business Class, our new Intercontinental Service means wider seats with increased pitch and better recline. Newly designed footrests. And swivel tables to make it easy to get in and out. What's more, we've reduced the number of seats in each row to 6 or 7. Add to that our new menus with more choices and award-winning cuisine and you're sure to experience an enormous difference

in how you land — relaxed, refreshed, ready to go. For First Class passengers, we've redesigned the upstairs cabin exclusively for you to make a more spacious, yet intimate atmosphere. Here you can indulge in personalized luxury, for instance with our new delicious buffet breakfast. In both classes, you'll find people committed to serving you with an unsurpassed European standard of elegance. Lufthansa's new 747 Intercontinental Service. A passionate beginning to a new era in flight. For more information and reservations call 1-800-645-3880.

A passion for perfection.™



Lufthansa

Lufthansa is a participant in the mileage programs of United, Delta, USAir and Continental. See your Travel Agent for details.



Today, as people question how to live in greater harmony with nature, we need to look to nature itself for a solution. This idea, like so many of the other ideas that have advanced civilization, is quite fundamental. At Mazda, we've taken this avenue of thought to heart in our search for alternate sources of energy for automobiles. One such source is hydrogen. Hydrogen comes from water, and as



urns, reverts back to water, producing only trace amounts of nitrogen oxides. Mazda has spent years developing this engine, and today, we have a working prototype. We are convinced that tomorrow the hydrogen engine will help Mazda revolutionize the relationship between car and environment.



AN INVITATION TO PROFESSIONALS WHO'VE DISCOVERED BUSINESS SOFTWARE CAN'T REPLACE BUSINESS SENSE.



If you're one of the many individuals who've realized that your investment in technology alone hasn't provided the solution to your business problems, this briefing is for you.

CIO Magazine, Andersen Consulting and Walker Interactive Systems are hosting morning symposiums to discuss planning for enterprise-wide business and accounting systems into the future. In a few short hours you will understand the factors influencing this business model of the future, and be better able to equate the requirements of your organization to the type of business applications needed to best respond.

While other seminars simply talk about technology, we will show you how to apply it. You will learn how business applications can yield greater value for your organization today, while providing an ever-increasing return on your software investment for years to come.

Space is limited. CPE credit is available. To make a reservation call 1-800-551-7638.



Walker Interactive Systems



ANDERSEN
CONSULTING

ARTHUR ANDERSEN & CO. INC.

THE FUTURE: A SOLUTIONS SEMINAR
Understanding the Business and Accounting Model of Tomorrow

Minneapolis, June 2; St. Louis, June 3; Los Angeles, June 4; San Francisco, June 5; Miami, June 9; Raleigh, June 10; New Orleans, June 11; Dallas, June 12; Toronto, June 16; Cleveland, June 17; Indianapolis, June 18; Chicago, June 19; Washington, June 23; Philadelphia, June 24; New York, June 25; Boston, June 26.

Books

devastating—statistical portrait of the impact of American racism. Scrutinizing figures on such topics as the racial income gap, segregated schooling, crime and politics, Hacker demonstrates that by virtually any measure, blacks are getting the short end of the stick. Between 1970 and 1990, for example, the median income in constant dollars for white families rose from \$34,481 to \$36,915—an increase of 8.7%. At the same time, black family income inched up 1.3%, from \$21,151 to \$21,423.

Two Nations doesn't explicitly deal with what needs to or should be done. Rather, Hacker clearly doubts the white electorate will back any reform. "A huge racial chasm remains," Hacker declares, "and there are few signs that the coming century will see it close."

In *The Dispossessed: America's Underclasses from the Civil War to the Present*, Jacqueline Jones, a historian at Brandeis University, is out to show that the underclass cuts across racial and geographic lines, though blacks are always the worst off among the poor. She also uses history to argue that the underclass—or the dispossessed, as she prefers to call them—haven't been to blame for their poverty. From the late 19th century onward, Jones argues, the evolving global economy shunted some workers—black and white—to the margins of society. Long before the 1980s, pervasive competitive and technological changes sharply increased the rewards for skill and education while constricting the livelihoods of less-skilled workers.

What stands out in *The Dispossessed*, though, is Jones's detailed portrait of the impoverished. She argues passionately against the widespread belief that the poor—especially the black poor—choose to live outside the mainstream. "The white middle class," she writes, "has had no monopoly on the virtues of hard work, love of family, and commitment to schooling for their children."

Northwestern University sociologist Christopher Jencks is perhaps the country's most reasoned, supple thinker on poverty and race. In *Rethinking Social Policy: Race, Poverty, and the Underclass*, a collection of six essays written for the *New York Review of Books* and other periodicals, Jencks takes on such topics as affirmative action and whether the government's social "safety net" has perversely created an urban underclass. At all times, he sticks close to available data and readily admits when a social scientist has nothing to offer.

Two essays stand out. "Is the American Underclass Growing?" takes apart a word that has become synonymous with black urban ghettos. Noting that people talk and write about the underclass in



LOOK TO THE EUROPEAN BANK THAT'S LOOKING LONG-TERM IN AMERICA.

After twenty years in the U.S., we've grown to be one of the largest foreign banks, with a reputation for excellence, and one of the most often chosen as agent or co-agent.

More than a demonstration of our technical skills, we believe it shows our willingness to build strong ties. To us, successful deals are the result of successful partnerships. The relationships we've formed with major U.S. corporations and businesses prove it. We'd like to prove it to you.

THE EUROPEAN BANK FOR AMERICAN BUSINESS



CREDIT LYONNAIS

NEW YORK • CHICAGO • LOS ANGELES • HOUSTON • SAN FRANCISCO • ATLANTA • MIAMI • DALLAS • BOSTON

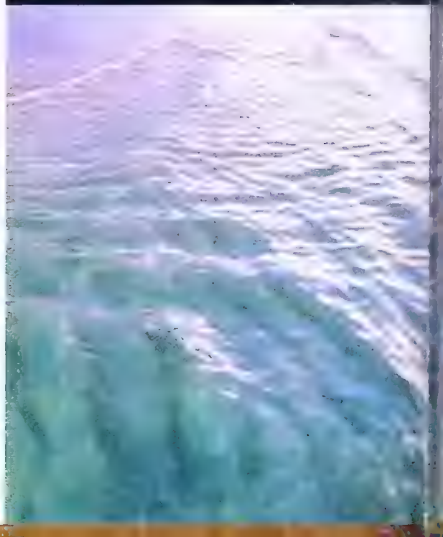
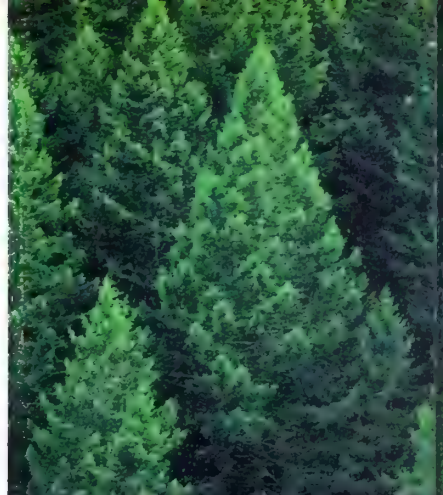
Some companies search the four
corners of the world for the most advanced
telecommunications technology.

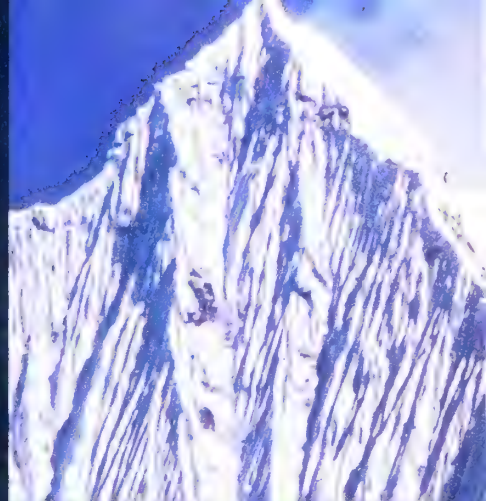


Curious, isn't it, when half the Fortune 500,[®]
more than two hundred universities
and most major telephone companies have
already found it.



Technology the world calls on.





FIDELITY EQUITY-INCOME II

Top Performance From High-Yielding Stocks

Fidelity Equity-Income II Fund was ranked among the top equity income funds in 1991.¹ This **no-load** Fund purchases stocks that offer growth potential with an income cushion of dividends. Remember that greater returns can also mean greater risk and investors should realize that Equity-Income II's share price and return will fluctuate.

Start with \$2,500, just \$500 for IRAs and Keoghs. Call Today.

1-800-544-8888

Fidelity Investments

Average Annual
Total Returns* as
of Dec. 31, 1991

46.60%

1 Year

36.72%

Life of Fund

8/21/90-12/31/91

2r According to Lipper Analytical Services, Equity-Income II ranked #2 out of 71 equity income funds for the one-year period ended 12/31/91. *Total returns are historical and include change in share price and reinvestment of dividends and capital gains. Share price, yield, and return will fluctuate and you may have a gain or loss when you sell your shares. Past performance is no guarantee of future results. For a free fact kit containing a current Fund prospectus with more complete information, including management fees and expenses, please call or write. Read it carefully before you invest or send money. Fidelity Distributors Corporation, P.O. Box 660603, Dallas, TX 75266-0603.

CODE: BW/EII/051892

America's return to time-honored hospitality



Western and Traditional
European Styles

San Francisco..... The Fulton Inn	Chicago..... The Midland	Boston..... The Lenox
San Francisco..... Vintage Court	Cincinnati..... The Garfield House	New York..... The Mayflower
Seattle..... The Mayflower Park	Dallas..... The Stoneleigh	New York..... The Gorham
Portland..... Vintage Plaza	Gavlestone.. The Tremont House	Philadelphia..... The Latham
Salt Lake City..... The Peery	Albuquerque..... La Posada	Washington D.C... The Latham
Santa Barbara... Montecito Inn	Santa Fe..... Plaza Real	Atlanta..... Regency Suites
Honolulu..... Waikiki Joy		
Anchorage.. Northern Lights Inn		

Reservations 1 800 447-9559

Books

different ways, Jencks explores the term's four major connotations, looking at income levels (the impoverished underclass), income sources (the jobless underclass), cultural skills (the educational underclass), and moral norms (deviations from middle-class values). Analyzed this way, the underclass is a much more heterogeneous group than the term would suggest. Jencks also argues that not everything is getting worse for those at the bottom of society. Yes, economic conditions for workers without a higher education have deteriorated, and two-parent families are scarcer. But the proportion of all mothers collecting welfare has leveled off, and both non-Hispanic whites and blacks were more likely to earn a high school diploma or a general equivalency diploma in the late 1980s than at any time in the past.

For readers concerned with explicit policy implications, Jencks offers another valuable chapter in "Reforming Welfare," co-authored with his colleague Kathryn Edin. After establishing that mothers on welfare operate according to the same moral principles as most other Americans—they believe that their first obligation is to take care of their children—the authors show that welfare seldom enables mothers to pay for such necessities as food, shelter, electricity, furniture, clothing, and the occasional outing. That's why recipients often cheat, working off the books in the underground economy. The fact is, an unskilled single mother cannot support herself and her children today either by working or by collecting welfare.

Jencks and Edin want to replace the existing welfare system. They want to concentrate on helping out all parents who work in low-wage jobs, especially single mothers. They call for such benefits for low-income parents as larger tax credits for child care, access to health insurance, and tax credits for housing expenses. This system, which would couple greater demands on society with greater demands on the poor to work and take responsibility, is politically palatable to the left and the right.

While Hacker and Jones seem to address the broader, overarching themes Jencks is willing to come up with on practical way out of the debilitating impasse over what to do. He recognizes that any successful poverty program will cost lots of money. And any successful program must also encourage an individual initiative. Now is time for liberals and conservatives to find common ground for bold actions lest we see more Americans condemned to a vicious cycle of poverty.

BY CHRISTOPHER FARRELL

Farrell covers economics.

THE RECOVERY IS PROCEEDING BY FITS AND STARTS

The shape of nearly all past recoveries has been tied to the strength of the rebound in the goods-producing sector. As manufacturing and construction go, so goes the upturn. By that rule of thumb, this recovery will not pack the usual punch. However, after three years of recession and stagnation, the economy does appear to be moving to a higher plane of growth that consumers and businesses can finally feel.

Goods producers will not supply the same thrust as in most previous upturns because heavy debt burdens and high long-term interest rates will weigh on the demand for credit-sensitive items, such as cars and homes. Also, the rebound in income growth will not match that of past recoveries because of widespread corporate restructuring aimed at cutting costs and boosting productivity.

The latest data show that manufacturers and builders are looking at better times, but they also point to problems. Despite rising factory orders and lean inventories, the nation's purchasing managers say that industrial activity slowed in April (chart). Sales of domestically made cars picked up a bit in late April, but sales for the month held at the March annual rate of 6 million. Moreover, the rebound in construction is not as broad as it usually has been in past recoveries.

The spotty nature of the recovery shows up in the Federal Reserve Board's latest survey of business conditions. The May 6 report says that economic activity increased further since the March report, but that "conditions remain uneven across regions and sectors."

The government's index of leading indicators, its main recasting gauge, also suggests a subpar recovery. The index rose only 0.2% in March, following gains of 0.8% in February and 1% in January. But in the early months of past recoveries, the leading index has averaged monthly increases of more than 1.5%, with advances often exceeding 2%. The index appears to be capturing some of the special forces that are restraining the current upturn.

ORDERS POST HEALTHY GAINS

To be sure, the recovery appears to be proceeding along traditional lines. A combination of strong sales and weak output last quarter left business inventories exceptionally lean heading into the second quarter. Replenishing those stockpiles will lift production and employment this quarter.

That pattern shows up in the recent manufacturing data. Factory orders for durable and nondurable goods rose 1.6% in March, the largest increase in five months. The monthly advance was also the third in a row, something that hasn't happened in nearly four years. Producers of both durable and nondurable goods posted healthy gains, although a big jump in bookings for new aircraft accounted for nearly half of the overall rise.

The recent rise in orders and shipments caught many manufacturers just at the time when they were cutting output in an effort to eliminate the excessive inventories that had built up at the end of 1991. As a result, factory stockpiles are extremely low relative to demand as manufacturers head into the second quarter.

The ratio of inventories to shipments fell sharply in both February and March (chart). In fact, the March reading was the lowest in 13 years, and the ratio for durable goods was the lowest on record. The data go back to 1958. A ratio that low suggests that inventories and shipments are out of balance and that manufacturers will have to lift output in order to meet demand.

However, not all signals are flashing green in manufacturing. Orders are still coming in slower than goods are being shipped out. That means the backlog of unfilled orders is declining. It fell 0.6% in March, the seventh consecutive drop. That shrinkage does not reassure manufacturers that there will be enough business in the pipeline this summer to justify big additions to output—or costly additions to payrolls.

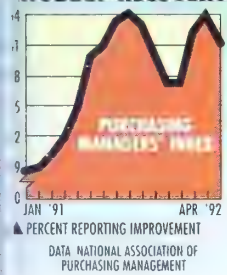
That could explain why the National Association of Purchasing Management reported that the manufacturing recovery slowed down in April. The NAPM's index of industrial activity fell to 51.3% last month from 54.1% in March. Still, a reading above 50% indicates that the factory sector is expanding, but at a slower rate in April.

BUILDERS FACE A LOPSIDED RECOVERY

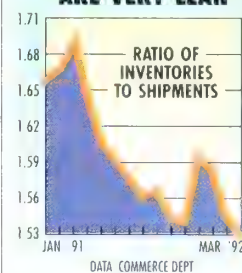
The second largest segment of the goods side of the economy, the construction industry, continues to climb out of its own slump. But as in the factory sector, the recovery is uneven. Homebuilding has been sailing along for a little more than a year, while commercial and office construction remains under water.

Total outlays for building projects increased by 1.6% in March, with large advances in government projects and

MANUFACTURING'S WOBBLY RECOVERY



FACTORY STOCKPILES ARE VERY LEAN



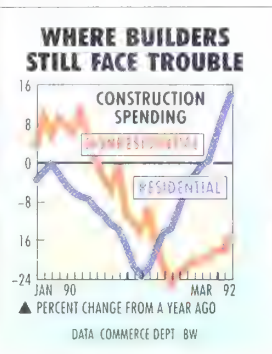
Business Outlook

residential construction. For the first quarter, spending grew at a healthy 9.7% annual rate after adjusting for inflation. And the F. W. Dodge Div. of McGraw-Hill Inc. reports that new contracts for all construction rose at a strong 28.7% annual rate last quarter.

These impressive gains, however, mask the problems in commercial building. Nonresidential construction has fallen 15.1% from its pace of a year ago—which was 14.3% below spending of March, 1990 (chart). And the Dodge survey shows that contracts for such building projects dropped by 8.9% in the first quarter.

Commercial real estate clearly is not contributing to the overall economy's recovery as it has in past upturns. The overbuilding of the 1980s and the reluctance of banks to make real estate loans have hampered industrial and office projects.

More important, demand just isn't there. White-collar layoffs have added to the glut of available office space. Until payrolls



expand again, businesses are unlikely to need more space. So, too, the troubles in retailing have reduced demand for new stores. And low operating rates in the factory sector suggest that manufacturers will not need to increase their capacity by much this year.

MORTGAGE RATES REMAIN LOW

Housing is a totally different story. Homebuilding climbed 1.8% in March, the eighth gain in 11 months. Spurred on by the drop in mortgage rates since mid-1990, spending on residential construction is up by 13.9% from a year ago.

All of the gain has been in single-family homes, which account for 90% of new-home construction. The oversupply of apartments in many regions will keep multiunit

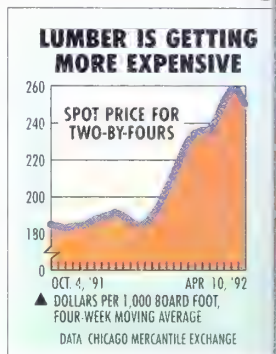
construction from staging much of a recovery this year.

How long will homebuilding's momentum last? One key factor will be mortgage rates. The average rate on a 30-year fixed mortgage stood at 8.92% for the week ended May 1. And with short-term rates at 20-year lows, adjustable-rate mortgages are extremely attractive. One-year adjustables averaged 6% on May 1. Mortgage rates are low enough to keep the housing recovery going. That means that the upturn in consumer spending on home-related goods will also continue.

But mortgage rates alone cannot sustain the housing rebound. Since rates seem unlikely to fall much further, faster growth in jobs and incomes must now provide the financial foundation for further gains. Already, mortgage applications for home purchase have dropped some 30% since early February, partly reflecting the leveling off of rates.

One new problem: A spike in lumber prices is eroding affordability. The cost of lumber jumped by 50% from December to March because of increased demand, import restrictions, and environmental concerns (chart). Prices have come down a bit since then, but the National Association of Home Builders calculates that the higher cost of wood will add \$2,000 to \$3,000 to the \$120,000 median price of a new home.

The increase in construction costs, although worrisome for some buyers, isn't large enough to derail the housing recovery. That's important because a continued upturn in homebuilding is crucial to getting the economy moving. And no recovery has ever gotten off the ground without a rebound in manufacturing. Since there aren't a lot of players in this upturn just yet, the economy cannot afford to lose two of its star performers.



THE WEEK AHEAD

PRODUCER PRICE INDEX

Tuesday, May 12, 8:30 a.m.

Producer prices of finished goods likely rose by 0.3% in April, say economists surveyed by MMS International, a unit of McGraw-Hill Inc. Producer-price inflation remains subdued in the early months of this recovery. In March, finished-goods prices rose just 0.2% and were up a mere 0.9% from a year earlier.

CONSUMER PRICE INDEX

Wednesday, May 13, 8:30 a.m.

As with the forecast on producer prices, the MMS survey projects that consumer prices increased 0.3% in April, after a faster 0.5% gain in March. Even excluding volatile food and energy costs, prices

likely rose by 0.3% in April as well. Clothing prices probably fell last month, which should offset gains elsewhere.

RETAIL SALES

Wednesday, May 13, 8:30 a.m.

Retail sales likely rose by 0.3% in April, say the MMS economists. However, non-auto purchases probably increased by a stronger 0.5%, because a late Easter lifted buying at apparel and department stores. In March, total retail sales fell by 0.4%, but that followed strong advances in both January and February.

BUSINESS INVENTORIES

Thursday, May 14, 10 a.m.

Inventories held at factories, wholesalers, and retailers were probably flat in

March, after no change in February as well. Manufacturers already have reported little change in their stock levels in March, leaving factory inventories at their lowest level in three years. Business sales probably increased by 0.5% in March, after rising 1.4% in February.

INDUSTRIAL PRODUCTION

Friday, May 15, 9:15 a.m.

Industrial output likely edged up 0.3% in April, following a 0.2% rise in March. Utility use fell back after a cold March pushed up energy demand. However, factory output may have been lifted by auto output. The expected gain in production suggests that capacity-utilization rates rose to 78.2% in April, from 78.1% in March, says the MMS report.

This is the only dollar bill of its kind in the world.



It was entrusted to us by one of our 5 million policyowners. They, in turn, were given it by an employer as part of their wages. Wages they had to work hard for.

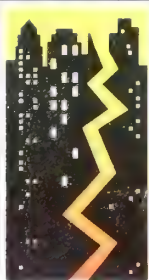
The least we can do is invest it wisely and prudently, so that whenever it's needed, it will be here, ready and waiting.



The Company You Keep.®

MAY 18, 1992

THE ECONOMIC CRISIS OF URBAN AMERICA



Can it be that nothing has changed? Nearly 30 years after Lyndon Johnson unveiled his vision for a Great Society and 10 years after Ronald Reagan launched his laissez-faire revolution, poverty and income inequality persist. Then, as now, the breeding ground of

economic misery is the American city, where a crisis has been festering for years.

It took a brutal beating, an unexpected jury verdict, and the sudden rampage of rioting, looting, and indiscriminate violence to bring this crisis back to the forefront. Racism surely explains some of the carnage in Los Angeles. But the day-to-day living conditions with which many of America's urban poor must contend tell an equally compelling story—a tale of economic injustice.

LIFE SENTENCES. The poverty rate, which fell as low as 11% in the 1970s, moved higher in the Reagan years and jumped during the past couple of years. Last year, an estimated 36 million people—or about 14.7% of the total population—were living in poverty.

More of them live in cities than ever before. About 42% of the impoverished live in center cities, compared with 30% in 1968. And while the total number of

urban poor is split fairly evenly between blacks and whites, black poverty is much more concentrated—more than 60% of poor blacks now live in center cities. Hispanics, whom the Census Bureau counts sometimes as black, sometimes as white, have a similar concentration of their poor in the center cities, about 59%. Only 34% of poor whites reside in the cities. No matter their race or ethnic background, though, the poor suffer from inadequate health care, failing schools, and the terror of drug-related violence.

The economic crisis of urban America is, of course, troubling on moral grounds. If persistent poverty and the array of consequences that often follow in its wake—from teenage pregnancy to welfare dependency to crack addiction—is not addressed, then an entire group of people will be condemned to a permanent state of underprivilege and despair.

But it isn't only the economic well-being of the poor that will suffer from neglect. The direct and indirect costs to society of tolerating an underclass of urban poor is at least \$230 billion annually and mounting (table, page 40). Harder to quantify, but far more important, are the long-term consequences of depriving both the underprivileged and society of their economic potential—the chance to become better educated, better skilled, and more self-reliant.

How did urban poverty get so intrac-



1968
12.8%

1990
11%

PERCENT OF U.S. POPULATION LIVING BELOW THE POVERTY LINE

SOURCE: CENSUS BUREAU, 1990



More than 36 million Americans live in poverty
—and 42% of them are in the cities

Cover Story

table? One critical factor, observers of all political stripes now agree, is the weakening family structure in many inner-city communities, especially among blacks. A stunning 62% of poor blacks live in female-headed households, compared with 28% of poor whites. A large number of these mothers, highly dependent on welfare and with almost no job prospects, live isolated from mainstream society. It will be extremely difficult for their children "to have any shot at a middle-class life," says Isabel V. Sawhill, senior fellow at the Urban Institute.

Government policies, too, have played a role. Federal aid to cities as a percentage of city budgets is nearly 64% below its 1980 level. The paralyzing politics of a \$350 billion budget deficit don't augur well for increased spending—even though public investment may be just what's needed now. President Bush is groping for a response to the riots, while his contenders for power are making more political hay than policy (page 44).

Then, too, troubled race relations continue to poison the debate and may stand in the way of dispassionate problem-solving (page 47). A growing number of white Americans believe affirmative action programs have gone far enough. Meanwhile, many blacks don't believe white society cares enough to adopt forceful solutions. In a country where blacks account for 45% of the inmates in federal and state prisons, and 50% of black children under the age of six live in poverty, racism is ingrained. "White people who have vested interests in seeing that no changes are made will see to that," says Gregory Davis, an insurance underwriter at Cigna Corp., who also runs a program that puts middle-class blacks into inner-city Philadelphia schools to act as mentors.

There are, however, powerful economic forces of the 1980s that transcend these familiar explanations of urban poverty and deterioration. First is the



brutal impact of global competition, which wiped out manufacturing jobs, many of them held by workers living in cities. At the same time, the lure of the suburbs pulled millions of Americans out of urban America, shrinking tax bases.

PRESSURES. Intense global competition and technological change have dealt the poor the biggest income hit. As the U.S. economy faces the challenges of competition, there has been a sharp increase in wages for those with education and skills, an increasingly rare product of inner-city schools. At the same time, wages and jobs for the less skilled have dropped sharply. And the competitive pressure on U.S. companies to lower costs will only intensify as the free-trade zone linking Canada, the U.S., and Mexico expands in the 1990s.

Responding to such pressures, certain industries as early as the 1970s began to cut low-skilled employment, and the trend gathered force in the 1980s. The cumulative cutbacks have been deep. Almost 3 million manufacturing jobs have been lost since 1979, the last peak year of manufacturing employment. Certain light manufacturing industries that employed many city residents, such as apparel, have shrunk employment by more than 25%. For urban workers who count-

ed on steady factory jobs that require little education, the losses have been devastating.

Low-skilled white men in their 20s saw their annual income fall by 14%, after adjusting for inflation, from 1973 to 1989. The annual earnings of white male dropouts in their 20s fell by 33%. But black men in their 20s, at the core of the inner-city employment problem, suffered the most. Their earnings over the same time period fell by 24% and by a stunning 50% for high school dropouts. And in New York City, for instance, only

THE PRICE OF POVERTY

Low-income assistance, including food and housing, excluding medical care **\$120** BILLIONS

Cost of police and corrections* **\$50**

Additional gain to GNP if poor were fully employed **\$60**

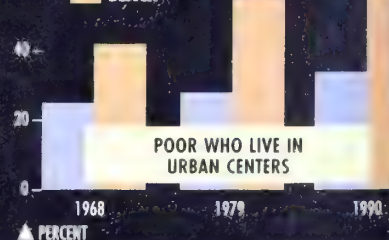
TOTAL \$230

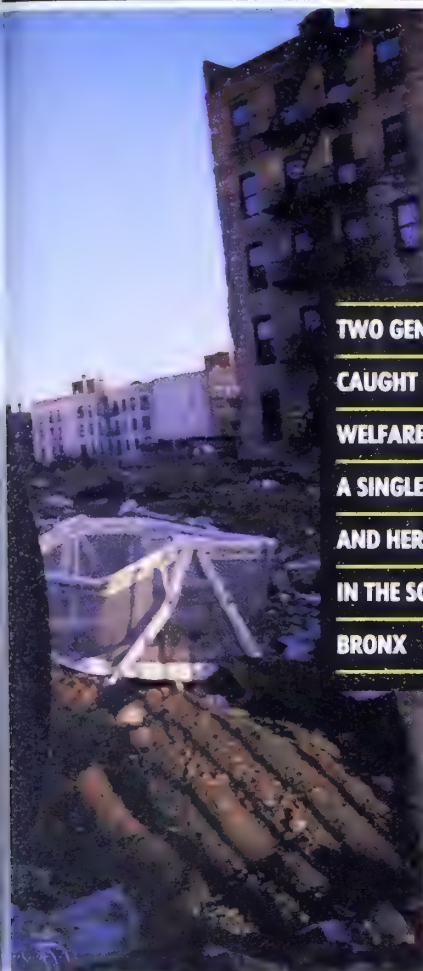
HOW MUCH MORE CRIME IS LINKED TO POVERTY?

DATA: CONGRESSIONAL RESEARCH SERVICE, CENSUS BUREAU, BW ESTIMATES

MORE POOR LIVE IN THE CITIES...

WHITE
BLACK





**TWO GENERATIONS
CAUGHT IN THE
WELFARE CYCLE:
A SINGLE MOTHER
AND HER CHILDREN
IN THE SOUTH
BRONX**

employment since 1979, according to George C. Zeller, senior researcher for the Council for Economic Opportunities in Greater Cleveland. There are no indications that this trend will let up. Next month, for example, Lotus Development Corp. will move 350 manufacturing employees out of facilities in urban Cambridge, Mass., to a new suburban plant on Route 128 that will be cheaper to operate.

Many cities, in a remarkable feat of resurgence, in the 1980s transformed themselves from manufacturing powerhouses to office centers. But the legal, financial, accounting, and other service jobs created in those high-rise offices had to be filled by workers with high skill levels and educational achievement. So competition intensified for the "increasingly scarce jobs for people without a high school education," says Paul E. Peterson, professor of government at Harvard.

Even getting a good high school education in the inner cities has become more difficult. Many schools can't teach children the basics that potential employers require, and some public schools are more noted for their hallway gunfights and drug sales than for their graduation rate. Four out of every 10 students drop out of Boston's schools, and of the six who do manage to graduate, three will be functionally illiterate, according to James M. Howell, president of the Howell Group Inc., a Boston-based economic consulting group.

Federal housing policy and the state of housing in the inner cities have also ensured that living conditions remain poor. Some neighborhoods burned out in the riots of the 1960s have never been rebuilt, and today many of the urban poor are living in racially segregated neighborhoods, confined to dilapidated

housing or fearsome high-rise projects.

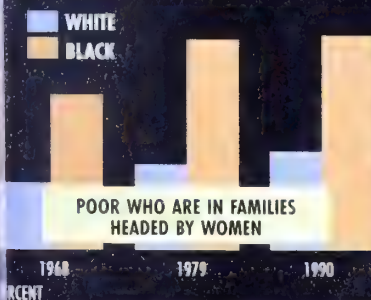
Even those with the income to buy a home are often denied loans. Many banks won't lend to blacks and Hispanics living in certain neighborhoods. A recent Federal Reserve Board study indicates that black and Hispanic applicants were denied home loans more than twice as often as white applicants with similar incomes. The Los Angeles area is home to nearly 20% of the banks nationwide that have received a rating of "substantially noncompliant" under the Community Reinvestment Act, the lowest possible score, according to Miami-based bank consultant Kenneth H. Thomas. "Our cities have been cut off in access to credit and capital and in the entitlement programs that are the ladders to opportunity," says the Reverend Charles R. Stith, a community activist in Boston.

VICIOUS CYCLE. Redlining and other neglectful policies help propel a vicious cycle of deterioration in the cities. As high unemployment, broken families, drugs, AIDS, and crime wreak havoc in the inner cities, lenders, insurers, and even retailers shun those areas. Squeezed by shrinking local economies, cities keep raising taxes and cutting back on crime prevention, sanitation, and the school systems. Larger businesses start to give up on the city.

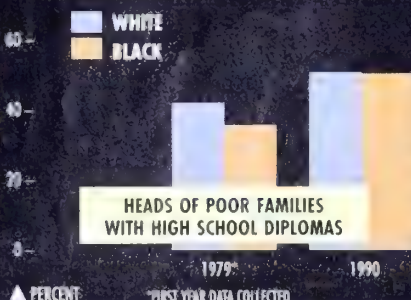
The result: Middle-class families, including black families, throw in the towel. Scared of crime, bothered by urban decay, and worried about their children's educations, middle-class families have been fleeing to the suburbs in an exodus that began in the 1970s and continued in the 1980s. The flight of the black middle class is especially worrisome because it weakens the community, church, and educational infrastructure for those blacks remaining in the inner cities, and robs many poor young blacks of role models. "We have poor blacks getting poorer, and middle- and upper-income blacks earning more and moving further

3% of black youths aged 16 to 19 are employed today, according to unpublished Labor Dept. estimates. "Inner-city blacks have the lowest skills. And when the bottom starts falling, they fall first and hardest," says Richard B. Freeman, economist at Harvard University. To lower costs and become more competitive, some manufacturers sought cheaper land and labor in the suburbs or greener fields of the South and West. And some companies have closed shop altogether. The Cleveland area, for example, has lost 37% of its factory

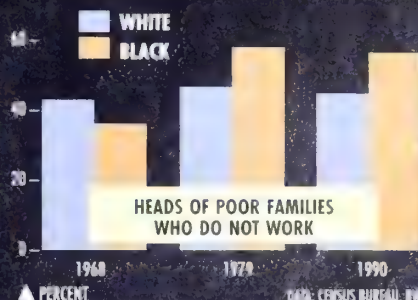
...AND IN SINGLE-PARENT FAMILIES...



...AND THOUGH THEY'RE BETTER EDUCATED NOW...



...THEY HOLD FEWER JOBS THAN IN THE PAST



Cover Story

away from the ghetto," says Marvin Dunn, professor of psychology at Florida International University in Miami.

Suburbanization also sharpens income differences. City dwellers today exist at the opposite end of the income scale from their suburban neighbors. In 1980, per capita incomes in central cities were about 90% of suburban per capita incomes. By 1987, per capita incomes of center city residents were only 59% of their suburban neighbors, according to the National League of Cities.

'GETTING BRIGHTER.' The future of the cities and of the urban poor need not be so bleak. There are sound economic reasons for businesses to remain committed to the cities, thus improving economic conditions there. Commercial office space in the downtown business districts of major cities is too substantial an investment for companies to simply abandon. Cities are still vital centers of commerce for finance, retailing, and other service-sector activities.

Indeed, the powerful economics of self-interest seems to be having an im-

pact on Corporate America. Many companies are working to improve inner-city schools, for example, well aware that an uneducated labor pool can translate into lost productivity and less consumer spending. In Dallas, community activist Roy H. Williams says large corporations have to realize "that if they allow Dallas to go under simply because of insensitivity to racial strife, then they can't prosper." Adds Donald B. Marron, chief executive of the PaineWebber Group: "I don't see how we can continue to be a successful, civilized, healthy growing society if a whole segment of our population is separate from success."

And many community groups, church leaders, and local entrepreneurs are fighting back. Take Pittsburgh's Homewood-Brushton section. A decade ago, it was just another ugly example of urban blight. In the 1950s and 1960s, white flight to the suburbs cut the area's population in half, to 15,000. Many prosperous blacks abandoned the area after civil disturbances in the late 1960s, dropping the population to 12,500. The four-block

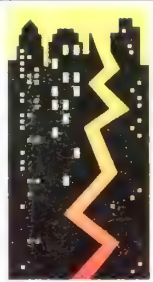
commercial district was boarded up except for a bakery, bank, and music store.

But a turnaround in Homewood got under way in 1984 when Mulugetta Birru, an Ethiopian banker, started rehabilitating apartment units through a local nonprofit agency. The new housing brought dollars and new traffic to the area. Today, Homewood has 60 small businesses, including a year-round farmer's market.

Similar stories can be found around the country. In Detroit, there's Focus HOPE, a not-for-profit operation under the leadership of Father William T. Cunningham, a priest. Among its various programs, it runs the Machinist Train-



CAN ANYTHING RISE FROM THE ASHES?



Like it or not, America this month got a good, hard look at the other Los Angeles—the city a world apart from the mansions of Beverly Hills and the movie studios of Hollywood. It's a place Ted Watkins Sr. knows well. From Watkins' L-shaped headquarters in

South Central L.A., the Watts Labor Community Action Committee has been struggling since 1964 to bring housing, small businesses, and jobs to L.A.'s poorest ghettos.

But now, his office joins the sorry ranks of more than 5,200 shops, markets, and buildings reduced to charred hulks in the already blighted inner city. Nevertheless, with patrons that include some 50 trade unions and a cadre of city officials, the 68-year-old Watkins is determined to rebuild. "I'm not going to let this stop me," he says, surveying the rubble that once was his office.

REBIRTH? In the days that followed the unrest, politicians and business leaders moved quickly to announce a rebirth for L.A.'s pockmarked landscape. That was before reality set in. The price tag is bound to dwarf initial estimates of \$1 billion in damages (table). Those costs could overwhelm the city government, not to mention the state of California.

Both are facing huge budget deficits.

And if business was reluctant to invest in the other L.A. before, it's balking now. "The inner city has never been an easy thing to sell," says Jack Kyser, chief economist at the Economic Development Corp. of L.A. County. "And that was before the images of looting and arson were filling TV screens."

L.A.'s inner neighborhoods have been fading for years. In their heyday just after World War II, factories there provided jobs for workers who churned out airplane components, tires, and Buicks. But the Watts riots of 1965 set things

back, and federal spending in the days of the Great Society couldn't things around. From 1975 to 1985, more than 75,000 jobs disappeared, says Vin L. Oliver, sociology professor at University of California at Los Angeles.

The economy's downturn only things worse, especially in such fields as defense and energy—industries that have traditionally provided work for inner-city residents. Take Lockheed. It was one of the few companies to set up plants in the city after the Watts riots. But in 1989, it closed its factory, cutting back in Pentagon spending. The



L.A. REDEVELOPMENT CZAR UEBERROTH MAY FIND IT HARD TO RAISE THE NEEDED FUNDS



URBAN DECAY IS DRIVING OUT THE MIDDLE CLASS, FURTHER ISOLATING BLACKS

stitute/CAD, which trains inner-city dwellers in math, computer skills, blueprint-reading, and machine-tool operation. The organization's annual budget of about \$50 million comes from foundation grants, state and Federal grants, and money earned by the sale of industrial parts. In Atlanta, former President

Jimmy Carter is working to improve that city's slums. His Atlanta Project has collected corporate pledges worth \$5 million cash and \$8 million more in personnel, equipment, and consulting services.

Even in South Central L. A., Jamie Wilkens is staying. He owns a mom-and-

pop grocery that survived the riots, though the next block over was burned down. Says Wilkens: "I've been here all my life. I can't imagine going anywhere else." In the face of the forces buffeting the inner cities, that's a bold stand, a statement that all Americans should heed. Globalization is ravaging the nation's most vulnerable citizens, and for too many years now, suburbanization has made it easier to ignore their plight.

But the events in Los Angeles have thrown a spotlight on the inner cities. The urban poor, black and white alike, need a sustained public and private investment so that they, too, can become part of the American dream. And if we fail to act, we will all be the poorer. Morally and economically.

By Christopher Farrell and Michael Mandel in New York, Michael Schroeder in Pittsburgh, Joseph Weber in Philadelphia, Michele Galen in New York, Gary McWilliams in Boston, and bureau reports

bs. And when Boise Cascade Corp. sold its plant in Torrance, not from South Central, it eliminated 75 workers, who averaged 10 in school and earned \$12 an hour. Make matters worse, the city population swelled with the influx of immigrants. Citywide unemployment is at 15% above the national average, and in South Central it runs as high as 50%. In 1991, a Social Services Dept. survey found that one out of every seven L. A. residents receives some form of government assistance. That's 1.3 million people, and the aid costs the county nearly \$2 billion a year.

Chore for government officials, including former Major League Baseball commissioner Peter V. Ueberroth, the

newly appointed head of the city's redevelopment efforts, is to persuade companies to overlook the potential for more crime. "[Businesses] want a feeling of some comfort in those neighborhoods," says California Governor Pete Wilson, who recently met with executives from 15 of California's largest companies to encourage investment.

SMALL POTATOES. The response was underwhelming: Bank of America pledged \$25 million in loans to help businesses rebuild. Other banks pledged less. J. C. Penney Co. will reconstruct its two outlets, as will Circuit City Stores Inc. And former Lakers star Magic Johnson is putting together a group of athletes and stars to invest in new businesses.

But the city needs nothing less than a

massive infusion of aid to make a difference. President Bush is promising some \$600 million in federal loans and other emergency support, but even that won't be enough. So far, Wilson has balked at approving the 0.25¢ sales-tax increase some Democrats proposed, which would have helped to make up the difference.

The city has no extra cash, either. The Los Angeles urban enterprise zone program, which provides tax breaks to companies that locate in the inner city, is limping along. And only two days before the riots, a city council committee voted to take \$48.3 million earmarked for its Community Redevelopment Agency's low-income housing program to pay for added police and fire services. To make matters worse, more than \$100 million in foreign investment, much of it from the Japanese, is also on hold.

Meanwhile, even at this early stage, Ueberroth is running into opposition. Some black leaders are grumbling that the man who pulled off the L. A. Summer Olympics in 1984 is a bad choice for the job, because he is white. And the local companies that he might have counted on for help are facing squeezes of their own: Unocal Corp., which recently announced \$900 million in cutbacks, may not replace three gas stations damaged in the South Central violence. With those kinds of roadblocks, the other Los Angeles faces a long climb back—even to its former bleak reality.

By Ronald Grover, with Gloria Lau and Jane Birnbaum in Los Angeles and bureau reports

THE ESCALATING COST OF DISORDER

LOS ANGELES Apr. 29-May 2, 1992 58 DEATHS

1 MILLION*

LOS ANGELES (Watts) Aug. 11-17, 1965 34 DEATHS

6 MILLION

LOS ANGELES July 23, 1967 43 DEATHS

4

LOS ANGELES May 17-19, 1980 18 DEATHS

5

NEW YORK CITY (Blackout) July 13-14, 1977 1 DEATH

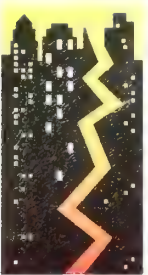
THE MOST COSTLY DISTURBANCES IN MODERN U.S. HISTORY

ESTIMATES IN ADJUSTED 1992 DOLLARS

*ESTIMATE
DATA: INSURANCE INFORMATION INSTITUTE, NEW YORK

SITUATION CRITICAL BUT NOT HOPELESS

Amid the partisan bickering, some plans may actually help cities



First came *L. A. Lawless*. The plot elements: a vicious beating, an inexplicable verdict, a made-for-TV orgy of mob violence and racial hatred. Now America must brace for *Capitol Offenses*, the sequel. It's an empty spectacle of hand-wringing, blame-shifting, and parti-

san Washington bombast that, far from providing aid to the nation's seething urban cores, may make Los Angeles' howl of rage seem all the more futile.

Indeed, the echoes of gunfire had scarcely died down in the L. A. war zone when the partisan sniping began in Washington. The White House insisted that misguided Great Society programs of the 1960s created the dependency that lay at the root of the L. A. uprising. Democrats fired back, charging that Republican "malign neglect" of the inner cities—and President Bush's conscious manipulation of the symbols of racial resentment—were to blame.

OVERDUE DEBATE. The bitter recriminations, just a preview of the jockeying that's to come, don't bode well for a rational debate over the urban underclass. In an election year dominated by the economic concerns of middle-income suburbanites, President Bush won't see much payoff from launching costly new aid plans (page 61). For their part, Democrats will gum the problem to death in a furious round of hearings and speeches aimed at linking the underclass' woes to a broader, Bush-inspired economic decline bedeviling all classes and colors.

The ensuing debate won't be terribly edifying, and most of the "action plans" dusted off by both the Administration

and its critics will be modest proposals that have been moldering on the shelf for years. But the policy picture is not as bleak as it first appears. By its very scale and searing impact, the L. A. rebellion has touched off a long-overdue debate on racism and economic injustice. And once you look past the partisan volleys, a few areas of consensus offer a flicker of hope.

For instance, it's widely acknowledged that the cities' myriad ills are multifaceted and that any solutions will have to take this complexity into account. Most urbanologists believe that neither the traditional Democratic nostrum of greater government intervention nor the GOP's reliance on market forces and the quasi-mystical allure of property ownership offer a complete cure.

There's even bipartisan agreement on some programs. Welfare, for instance, should be converted from an end in itself into a temporary help in a faltering job market. Early childhood intervention, through programs such as Head Start and prenatal care, has produced long-term gains and should be expanded.

Republicans and Democrats also want to use tax breaks to reward the working poor and devote far more government energy to helping the unskilled find work. On this, everyone agrees: The private sector has a bigger role to play. "I think what we learned from the War on Poverty is that you can't run things from the top down," notes House Majority Leader Richard A. Gephardt (D-Mo.). "You must give people the tools to help themselves."

There's a stark reality underlying such talk. The huge federal deficit and the equally precarious finances of many states mean government will be able to



offer precious little in the way of new money for programs to revive blighted neighborhoods. So politicians will be searching for ideas to leverage big results out of small up-front investments. And states, cities, and even neighborhood groups will become laboratories for new antipoverty approaches.

A CATALYST. The 1988 overhaul of the much-maligned federal welfare system indicates the tack politicians are likely to take. The idea then was to use the government as a catalyst rather than as a heavy-handed overseer. With bipartisan support, Congress passed groundbreaking legislation that required states to set up education, job training, and job placement programs for welfare mothers. That satisfied the GOP's demand for more government-imposed responsibilities and the Democrats' belief that the poor need help to enter the job market.

**BREAKING
POVERTY'S GRASP:
A FEW MODEST
PROPOSALS**

► **Expand Head Start to cover all eligible preschoolers**

This Great Society initiative improves school performance

► **Provide welfare recipients with education and job training**

New skills and learning could help steer welfare recipients into the work force

► **Help inner-city dwellers find suburban jobs—and get to them**

A way to trim the unemployment rate among young black men



CIGNA 'BIG SISTER'
KATI GRAY-SADLER
ON AN OUTING IN
PHILADELPHIA
WITH JACKIE
ECCELSTON AND
THEIR CHILDREN

housing tax credit also may get new support. Analysts say the credit is behind some 90% of the low-income housing built or renovated since its enactment in 1986. But the preference is due to expire in June, the victim of partisan gridlock over broader tax legislation.

Expansion of the earned-income tax credit, which rebates money to low-wage workers, also may garner support. Currently, as wages rise, reductions in the credit and benefits from other programs effectively give low-wage workers a marginal tax rate of more than 100%.

The Democrats have their own set of proposals. Senator David L. Boren of Oklahoma offers an old-fashioned public-works spending bill. His proposal, modeled after the New Deal's Works Progress Administration, would require some aid recipients to take public-works jobs for up to 32 hours a week. Boren argues that this would give the poor the dignity of meaningful work while helping the nation rebuild its deteriorating bridges, highways, and sewers. But critics call the idea a boondoggle that wouldn't lead to stable private-sector employment.

ABSENT FATHERS. Representative Thomas J. Downey (D-N. Y.) has a plan that is less traditionally Democratic. He intends to introduce legislation that would require the government to provide a single parent with minimum support and then go after deadbeat dads for the cash. The GOP may back the search for absent fathers, but it's likely to balk at providing financial support.

Arkansas Governor Bill Clinton's approach sounds even more Republican. The likely Democratic Presidential nominee's prescriptions include enterprise zones, as well as proposals to grant tax breaks to low-income families for contributing to college savings accounts, home ownership, or starting a business. And he would set up government-financed organizations to lend money and give advice to budding entrepreneurs—the sort of public-private cooperation the Bush Administration will be pushing as well. The poor, Clinton says, “want op-

The Bush Administration continues to press for market-oriented solutions. Using the smoldering wreckage of L. A. as backdrop, the White House intends to apply strong new pressure on Congress to pass Administration proposals already in the hopper. President Bush has pointed to initiatives offered by Housing & Urban Development Secretary Jack F. Kemp, such as expanding the Reagan-era idea of enterprise zones, which offer tax incentives to businesses that locate in depressed inner cities. Kemp also advocates expansion of the earned-income tax credit for low-wage workers and the low-income housing tax credit. And he supports efforts to enable low- and moderate-income families to buy or manage public-housing units. “When people lack jobs, opportunity, and ownership of property, they have little or no stake in their communities,” Kemp says. Demo-

crats quarrel with some, but not all, of Kemp's ideas.

There's no shortage of critics for his programs to turn public-housing units over to tenants. They complain that the plans do nothing to expand the housing stock and that few tenants would be able to or would like to buy their apartments. “These tenants aren't dumb,” says William C. Apgar, executive director of Harvard's Joint Center for Housing Studies. “They don't want to buy these units.”

There's more of a consensus building around Kemp's tax ideas. Democrats may back more enterprise zones as a way to attract jobs to ravaged neighborhoods, though a General Accounting Office study found that infrastructure, low crime rates, and access to labor markets were more important factors in site selection than tax rates. The low-income

Encourage corporations to encourage investment in inner city

Encourage corporations to train inner-city high school students

Provide the working poor with expanded tax credits for earned income

Help tenants find ways to own or manage public housing units

Subsidize or seed money for entrepreneurs to create inner-city jobs

Youth apprenticeships help students get jobs when they graduate

Income support would eliminate job disincentives and raise income levels

People with a stake in their community don't let it deteriorate—or burn

portunity and empowerment," not "top-down government programs."

It's unclear whether any of these programs—some of which may be expensive—could end the stalemate in Washington. But even as the gridlock continues, small community projects around the country have flowered to fill the vacuum left by government.

Consider the Nehemiah Plan, a program of more than 2,300 low- and moderate-income homes built in two of the worst neighborhoods in New York City. Churches raised \$6 million to subsidize

the kind of word-of-mouth networks about jobs that the middle-class already has. He also advocates van-pooling so youths can get to where the jobs are. Congress is mulling a demonstration project along those lines.

Others contend that what's needed is to create jobs where the workers are. That, they argue, is the only way the cities themselves will revive. In Chicago, for instance, South Shore Bank has spurred the development of a shopping center in a South Side neighborhood once dominated by flophouses. "You

Numerous proposals floating around Washington, including an ambitious Clinton plan modeled on one he used in Arkansas, would encourage companies to provide on-the-job training in skilled jobs to high school students. And the National Academy Foundation, funded by American Express Co., teaches 4,200 students in 80 urban high schools basic skills in finance, tourism, and other sought-after services. Many go on to college. "We're trying to teach them life skills, the value of education, and self-esteem," says J. Christopher Mrazek, the NAF's information systems manager.

TRAPS. Cigna Corp. is one sponsor of a program in Philadelphia that takes a more personal approach to bringing ghetto youths into the mainstream. In five schools, 35 black professionals help inner-city kids with school and take them on outings. Bank lending officer Nicole Vance, 25, meets regularly with eighth-grade black girls and talks to them about school, boyfriends, drugs, and

their future. Vance, who grew up in a tidy suburb far from the travails of inner-city life, says she's preventing these girls from falling prey to traps that abound for the urban poor. "Though I haven't grown up in their neighborhood, I can relate to them just because I'm black," she says.

Even those hardest hit by poverty can be reached, research indicates. A study by New York's Manpower Demonstration Research Corp. shows that a number of state

programs that aim to get welfare moms ready for the labor force have produced modest improvements in earnings and employment rates. The programs that work are comprehensive—and carry a high price. Hard-core welfare mothers need extensive remedial education, job placement, and child care to enter the work force. But the investment does have a payoff.

To some hardened cynics, these modest state and local experiments smack of Bush's "Points-of-Light" fatuousness. But in fact, steps to aid the nation's urban underclass are far more likely to spring from these community-based approaches than from the sterile debate in Washington. Will any of it be enough to help the hardest of the hard cases trapped in America's urban jungles? Maybe not. But as the L. A. explosion has starkly demonstrated, inaction and growing callousness could be far more costly in the long run.

By Susan B. Garland, with Christina Del Valle in Washington and bureau reports



construction. With a stake in their community, the homeowners have started to turn around their neighborhoods. "It's a gift God gave us," says housekeeper Carmine Perez, whose family moved to their home more than two years ago.

Housing is just one facet of the problem, of course. Critical to any recovery of the cities is work. Tens of thousands of jobs have fled the inner city and moved to the suburbs in recent years, leaving legions of unemployed youths behind. William Julius Wilson, an urban-affairs specialist at the University of Chicago, suggests creation of job-information banks in inner cities to provide

don't lose your shirt if you do it right and if you're there to stay," says Joan Shapiro, a bank official.

Such projects may help put some unemployed young men into the labor force. But few of the jobs that are available are seen as true opportunities: The pay is low and prospects for promotion virtually nil. With no payoff in sight, members of lost generations often drop out of school and drift into the drug culture. "They don't see a meaningful connection between school and post-school employment," Wilson says.

One popular strategy for strengthening the link is youth apprenticeships.

THE RIOTS: 'JUST AS MUCH ABOUT CLASS AS ABOUT RACE'



Beneath the dense smoke that hung over Los Angeles in the violent days of early May, parallel racial nightmares seemed to come to life. To many blacks, the Rodney King jury verdict confirmed an age-old cry of despair: *There is no justice for*

us in a white man's world. To many whites, the subsequent violence fulfilled an equally traditional fear: *This lawless bunch hurts and steals and destroys when things don't go its way.* And each group, remembering the 1965 Watts uprising, looked at the other in weary reproach: *Haven't they learned anything in a quarter of a century?*

In short, if you were looking for evidence that prejudice still flourishes in America, you got all the proof you needed. And that's how many outsiders viewed the crisis: "Racism a way of life in white U.S.," screamed a headline in *The Toronto Star* on May 3—one day before Toronto itself erupted in riots sparked by the police shooting of a black man, a suspected drug dealer.

But to see the verdict and the riots as just more evidence of the racial divide in America is to ignore a potentially more dangerous split: The growing gulf between the haves and the have-nots. Says Comer Cottrell, chairman of Pro-Line Corp., a black hair-care products company in Dallas: "These riots have been as much about class as about race."

TRICKLE UP. Just look at who got involved in the violence. The looters included blacks, whites, Hispanics, and a handful of Asians, and the property they pillaged was owned by blacks, whites, Hispanics, and Asians. Observes Pierre van den Berghe, sociology professor at the University of Washington: "When a person who is black loots a shop owned by a Korean, it's not black vs. Korean. It's underclass vs. middle class." Or, as a young, white Seattle looter shouted into TV

cameras: "It's not black vs. white. It's rich vs. poor. And we're poor."

The poor, of course, we will have with us always. But rarely has their distance from the wealthy been so apparent. The 1980s now seem to have boomed for very few: The Internal Revenue Service reports that the richest 1% of U.S. households owned 36% of the nation's wealth in 1989—up from 31% in 1983 (page 22). And the Congressional Budget Office says that most of the income gains over that period went to the same group.

As the gap widens, blacks are often

convenient to invoke the single mother, an exploiter of the welfare system, as a code for "black." Yet, since 1968, the number of impoverished households headed by white women has grown dramatically, too—in fact, the number has grown at virtually the same rate, 33%, as black female-headed families have.

DORMANT VIRUS. Yes, class distinctions clearly matter more than ever before—a most un-American idea. But the very fact that politicians can still score easy points with racial rhetoric shows that bigotry retains its potency. "Race is

never separate from class," says Lorenzo Morris, professor of political science at Howard University in Washington. "Rodney King was subject to arbitrary police violence because he was black. But the fact he was black gave them no doubt he was poor. It would have helped him if he'd been middle class."

Morris, who is black, speaks from personal experience. He was once taken to a police station—in handcuffs—for driving with an expired license. But when the officers learned he was a professor, the cuffs came off. "You should have told us before—we wouldn't have arrested you," he remembers them saying.

In the end, it may be futile to try to pinpoint where racism ends and classism begins. A more useful exercise is to set about improving schools, work skills, housing, health conditions—

solutions that cut across lines of race and ethnicity. William J. Haskins, vice-president for programs at the National Urban League, sums up the answer: "Jobs."

But policymakers should never forget that racism is like a virus lurking in the body politic: When hard times lower the body's resistance, out it comes. Haskins traveled by plane the weekend after the riots. As he settled in his first-class seat, an elderly white woman next to him got up, had a furtive word with the flight attendant, and switched to another seat. Class doesn't always tell.

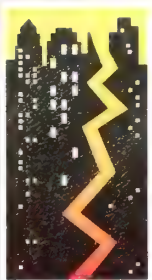


disproportionately affected, but not because of their race, says Christopher Winship, professor of sociology, statistics, and economics at Northwestern University. Rather, they are being hurt by society's structural changes: stagnant wages, disappearing jobs, inadequate education, and eviscerated public programs. The point is, many whites also get caught in the same traps.

The analysis gets confused, Winship argues, because "making poverty a black issue obscures the chasm between rich and poor"—an issue that many politicians would just as soon keep under wraps. For example, it's

ONE REPORTER'S TWO NIGHTS IN THE SLAMMER

BW's Russ Mitchell covered the wrong rally at the wrong time



On Friday, May 1, terrifying images of looting, fire, and random beatings in Los Angeles filled television screens around the world. Other U.S. cities were gripped with the fear that the chaos might spread. In San Francisco, the anxiety was especially high—with reason. The night before, looters had ravaged the city's downtown shopping district. Mayor Frank Jordan, a former police chief elected last fall on a law-and-order platform, assured a worried city that he would restore order.

He was as good as his word. On Friday night, police launched a preemptive strike against demonstrators in the city's Mission District. *BUSINESS WEEK* San Francisco bureau manager Russell Mitchell was in the area. When he stopped to observe the rally, he was caught in a police roundup. So were a host of other peaceful citizens: A drugstore manager, a shipping broker, a suburban homemaker.

Like Mitchell, most of those people spent well over a day in police custody. Their experience raises some of the most difficult questions a free society can face: Are we willing to exchange our civil liberties for protection? Could what happened to Mitchell happen to any of us?

I arrived at 7:20, well before that day's 9 p.m. curfew, to find hundreds of helmeted riot police controlling Mission Street. I wandered into a crowd of 75 to 100 people milling about on 21st Street, which crosses Mission. The few demonstrators were far outnumbered by a rainbow of onlookers: blacks, whites, Hispanics, East Indians.

After three minutes or so, the police ordered the crowd to move down 21st Street. But as we headed down the street, we saw a phalanx of police marching toward us. To our backs were

the police on Mission Street. With no warning and no explanation, baton-wielding officers herded us together. At no time had the police asked us to disperse. At no time had they suggested we might be subject to arrest.

HANDCUFFED. But that's just what happened. The female cop who arrested me looked furious—I'm not sure why. She patted me down, then bound my hands behind my back with plastic handcuffs. She patted me down again, and for good measure gave me a sharp slap to the crotch.

We piled onto a bus that took us to a pier near the Bay Bridge. Eventually, about 300 to 400 of us were crammed

men were kept outside in a chain-link pen for three hours. It was a chilly night, and many prisoners milled around rubbing their folded arms to keep warm.

Sometime after 4 a.m., the guards packed us into holding cells. Ours was a brightly lit 15-foot by 15-foot cinder block room with a concrete floor. There were 31 of us in there, jammed shoulder to shoulder on concrete benches.

THIRD WORLD? We couldn't do much to pass the time but talk. I fell into conversation with Brett Hamilton, a salesman for a shipping broker in town. "I'm concerned this is just the beginning of a period in America that allows the police to revoke any rules," he said. "How do you distinguish between what happened in the Mission District and what happens in some Third World countries where people can be arrested just because they happened to be in the wrong place at the wrong time?"

After eight hours we were let out of the holding cell, and booked on charges of unlawful assembly and failure to disperse. Finally, we were given something to eat—a pimento-loaf sandwich and an

THE NIGHT AFTER
LOOTERS RAVAGED
DOWNTOWN
SAN FRANCISCO,
POLICE LAUNCHED
A PREEMPTIVE
STRIKE



behind police barricades. At least they snipped off our cuffs.

At about 1 a.m., after hours of waiting, I was hustled into another bus with about 50 of my fellow prisoners. The police cuffed us again, so tightly that some people's hands were turning blue. Only when some of the prisoners were on the verge of tears did the officers loosen their restraints.

Although the cops wouldn't tell us where we were heading, we were bound for a county jail in Dublin, about 40 miles southeast of San Francisco. There, the women were led inside, while the

orange—and allowed to make a phone call. I reached my bureau colleague Joan O'C. Hamilton, who immediately set about trying to secure my release.

But it wasn't until Saturday night that the city's Board of Supervisors forced Mayor Jordan to let us out. Since jail bureaucracy moves at its own measured pace, I spent the night moving from one holding tank to another. It wasn't until nearly 4 on Sunday morning that I was put on a bus back to San Francisco. It dropped me off in the middle of town about 4:30—33 hours after I had first hit Mission Street.



Engineering is our other flagship.

Trafalgar House is a world leader in engineering.

Through John Brown and Davy, Trafalgar House has created a business with more than 50 offices worldwide.

With 26,000 staff who

design and construct advanced plants and facilities for the process, power, oil and gas, and metals industries.

With a range of proprietary and licensed technology that is unrivalled.

We are proud that it flies the colours of Trafalgar House.

A world-scale business serving world-scale industries and clients.

JOHN BROWN

Trafalgar House Public Limited Company, 1 Berkeley Street, London W1A 1BY.



TRAFALGAR HOUSE

A World Force in Engineering.



SAFETY EDGE:
TAURUS OFFERS
DUAL AIR BAGS

TAURUS GOES FOR THE TITLE

Suddenly, it's toe-to-toe with Accord to be America's top seller

It was a slap in the face to Detroit. In 1989, Ford Motor Co.'s subcompact Escort was toppled as the best-selling car in America by the midsize Honda Accord. Since then, to the embarrassment of domestic carmakers, Accord ads have bragged about the car's top spot. But no more. Ford is back.

Its Taurus, the 6-year-old midsize model, is leading the resurgence. Since being restyled last fall, the Taurus has been steadily closing the sales gap with the Accord. During the first four months of 1992, Taurus sales rose 10%, while Accord sales dropped off 8% (chart). Indeed, Taurus sales were so strong that Ford's total market share rose a full point during the period, and the company turned a \$338 million first-quarter profit—its first quarter in the black since the summer of 1990.

The two cars are now running neck and neck, with Honda ahead one month

and Ford ahead the next. Tailgating them both is the Toyota Camry, which has logged a 22% increase in sales this year. "There is going to be an explosion here real soon, and it's going to be interesting to watch," says George C. Peterson, president of market researchers AutoPacific Group Inc. in Santa Ana, Calif.

Of course, more is at stake than simple bragging rights. Midsize family sedans such as the Accord, Camry, Taurus, and the Chevrolet Lumina make up 34% of the total car market. Better yet, they generally return an average 16% to 18% profit margin. On smaller cars such as the Escort, manu-

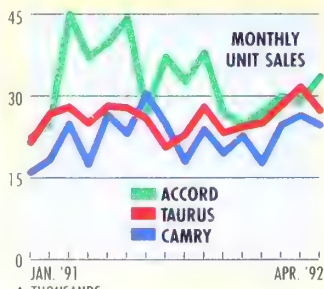
facturers generally lose money. And a steady supply of aging baby-boomers means demand for midsize cars will stay strong. Midsize sales are expected to rise 20% over the next five years.

SHORT SHRIFT. Nearly all of the auto companies are doing their best to grab a piece of the action. Nissan Motor Co. is getting its Altima ready for a summer debut. And Chrysler Corp. this fall will launch its midsize LH sedans—the Dodge Intrepid, Eagle Vision, and Chrysler Concorde. But the newcomers face a tough challenge in dislodging the three leaders, which hold a combined 76% of the segment. Indeed, Ford's sales are so strong that it casually dismisses its onetime fierce rival, Chevrolet. The Lumina, "is a dead dog," crows Richard N. Beattie, Ford Div. marketing plans manager. Chevy isn't giving up, though.

It plans to come out with a revamped version of the model soon.

The darling of baby boomers, the Accord grew over the decades from a compact to a midsize sedan as its customers aged. But consumers can be fickle. The Accord is showing its age, and Toyota's new Camry is cutting into its cus-

HEAVY TRAFFIC IN THE MIDSIZE MARKET



DATA: WARD'S AUTOMOTIVE REPORTS

tomter base. Indeed, on the West Coast, where Japanese-made Accords are sold, sales plummeted 50% in March and an additional 26% in April. "I think we're giving Accord some fits," says George Borst, Toyota's vice-president of strategic and product planning. Adds analyst Maryann N. Keller of Furman Selz Inc.: "Camry is essentially stealing customers from Accord and forcing Ford look good in the process."

Meanwhile, the Taurus and Camry have launched a marketing blitz against Accord. Like its Ford rival, the Camry was restyled last fall. The Accord hasn't been remodeled since 1990 and won't be until 1994. And both the Ford and the Toyota offer a V-6 engine, bigger than the Accord's four-cylinder power plant. Ford also is pushing its safety edge: It's the only midsize car offering both a driver's air bag as standard equipment and, for an extra \$400, an optional passenger-side air bag. With 80% of Taurus buyers ordering dual bags, Ford says it can't keep up with demand.

SECRET WEAPON. Honda doesn't seem to be panicking. "I guess there is a little bit of a concern for us, but nobody is jumping off the roof—yet," says Gerald R. Bankston, Honda Motor Co.'s vice-president for marketing and distribution. The anxiety level might grow if Honda can't work down its inventory. Dealer stocks of Accords are hovering around 80 days' supply. That's a lot of cars waiting to be sold, especially considering that this time last year, Honda had only 50 days' worth of Accords.

Privately, even some Honda officials concede that Taurus will win top-seller honors this year. Best of all, Ford says it has kept Taurus' sales booming while reducing its dependence on sales to rental-car fleets. Toyota and Honda avoid pumping their numbers up with rental sales, on which companies usually take a loss. But if Taurus and Accord approach breakeven nearly even, rental sales could be a secret weapon: Ford could push enough vehicles into the fleets to ensure victory.

Ford can't turn on the cruise-control yet, though. Chrysler execs say they are "hungry and eager" for the chance to take on the competition with their new H models. "What you are seeing is a resurgence of the American car in that market," says Steven Torok, general manager and head of marketing for the H team. The three sedans feature a daring design, standard dual air bags, and a standard V-6 engine. Chrysler will have fewer than 100,000 to sell this year, however, so the trio won't challenge the leaders. In 1993, though, Taurus marketers may have to keep one eye on the earview mirror as they race against all comers.

By Greg Bowens in Detroit

FUND RAISING

HE DOESN'T DO WEDDINGS OR BAR MITZVAHS BUT...

Mikhail Gorbachev's glitzy U.S. tour is raking in big bucks

In Moscow, he's a relic of a bygone era. Yet bring Mikhail S. Gorbachev to the U.S., and he can still get foreign policy pooh-bahs and corporate chieftains to swoon like anxious teens gasping at the sight of Axl Rose. On his current U.S. tour, for instance, Gorbachev is being feted by the likes of Ronald Reagan, President Bush, and former PepsiCo Chairman Donald M. Kendall.

The two-week swing is designed to raise money for the Gorbachev Foundation, a Moscow think tank. Gorby groupies are paying big bucks to dine with the last man in the room when the lights went out on communism. There are the

address the area's environmental crisis.

When his tour ends, on May 15, Gorbachev will take home nearly \$3 million for his Moscow center and its U.S. arm in San Francisco. During the next two years, his goal is to raise up to \$70 million for an endowment, says Gorbachev tour manager James Garrison. That means calling in some chits from old pals such as Archer Daniels Midland Chairman Dwayne O. Andreas, who is hosting a luncheon in his honor at the Economic Club of New York, as well as Kendall, who plans to make a sizable corporate contribution. The MacArthur Foundation has also agreed to provide

\$50,000 to the think tank.

The Gorby blitz has had its share of problems. His May 2 arrival was overshadowed by the L.A. riots. And some potential donors—including former U.S. Ambassador Arthur A. Hartman—balked after failing to get enough details about the Gorbachev Institute's plans. Garrison says Hartman "never bothered to ask." Startup money, he says, will be used to hire staff and buy computers and telecommunications equipment for the two centers.

HIDDEN AGENDA? Even President Bush has taken flak for inviting Gorbachev and his wife, Raisa, to the White House a month before he hosts a state visit by Russian President Boris N. Yeltsin, a Gorbachev rival. U.S. officials say the Gorbachevs are private guests of Bush.

Then there's the touchy issue of whether Gorbachev's think tank may be used to revive his political career. In early May, Gorbachev spoke of making a comeback. That has made one big-name sponsor, Henry A. Kissinger, a bit skittish about hosting a breakfast in New York on May 12 to support the institute. Says Kissinger: "It should look at long-term problems and should not engage in political activities."

But for a man with a Communist upbringing, Gorbachev has a knack for turning a profit. New York's Yeshiva University is expecting to rake in \$975,000—with a big cut going to Gorby—for a black-tie dinner where the former Soviet leader will talk about anti-Semitism. At this pace, Gorbachev will soon be able to offer a few capitalist pointers to Reagan.

By Brian Bremner in Washington



WITH REAGAN: TAKING CUES FROM THE MASTER

500 guests who put up \$5,000 each to attend a Reagan Library luncheon in Gorbachev's honor. And San Franciscans snapped up 4,000 tickets—at \$40 a pop—to hear a Gorbachev speech. Says Atlantic Richfield Chairman Lodwick M. Cook, who hosted the Reagan library fund-raiser: "Here is a man who brought about more freedom in the world."

Gorbachev is taking a cue from Reagan, who parlayed his White House years into millions in speaking fees and \$70 million in backing for his library. The ex-Soviet leader hopes to use his red-star power in the U.S. to endow his research institute, which will study the transition of centrally planned states into market economies, find ways to defuse instability in Eastern Europe, and

Commentary/by Evan I. Schwartz

IT'S TIME TO CLEAN UP CREDIT REPORTING

Last June, Robert J. Corbey applied for a \$2,000 loan to put vinyl siding on his Aspen Hill (Md.) home. To Corbey's amazement, his lender refused, citing unpaid mortgage bills on two homes in Virginia and an Internal Revenue Service lien against him and his wife, Ann. Corbey was furious. He had paid off his 30-year mortgage, he had never lived in Virginia, and he had never been married to anyone named Ann. The erroneous information, Corbey learned, came from his Equifax Inc. credit report. Computers at the credit bureau had confused him with another Robert Corbey. It took him more than eight months to clear up the mess.

Corbey is just one among thousands. The Federal Trade Commission disclosed last year that credit reports are now its biggest source of consumer complaints. In many cases, much more than vinyl siding is at stake: An error-ridden credit report can prevent a consumer from getting anything from a MasterCard to a job.

HILL SLIDE. Congress has long been promising to crack down on such abuse. For more than two years, it has been holding hearings and preparing proposals to overhaul the Fair Credit Reporting Act of 1970, which didn't foresee the exploding use of credit or computers. But instead of passing a reform bill, the House Banking Committee in March gave in to pressure from industry lobbyists and turned the bill against consumer interests.

There is one last hope. This month, a similar bill is scheduled to reach the Senate that could replace the failed House effort and quickly redress consumer concerns. But if a law doesn't pass this year, momentum is likely to subside, and consumers probably won't get any protection on a national level.

What consumers are hoping for are legitimate guarantees of privacy. That was the intent of strong legislation introduced last fall by Representative Esteban E. Torres (D-Calif.). The pro-

posal called for quick corrections of mistakes on credit reports. It also gave consumers the right to a free yearly report to check their credit records. The three biggest credit bureaus, TRW, Equifax, and Trans Union, agreed that a new law was needed and even made a few changes on their own. But many businesses remained concerned that undue regulation would only bog down a system that enables U.S. consumers

Consumer groups were outraged. "We can't accept a bill that gives consumers half a loaf and then ties state legislatures from filling in the gaps," says Michelle Meier, government-affairs counsel for the Consumers Union.

PANDERERS? Rather than allow the full House to vote on it, Banking Committee Chairman Henry B. Gonzalez (D-Tex.) escaped embarrassment by shelving the whole package. That riled industry groups. "We've given an all-American effort to get it passed," says D. Barry Connelly, executive vice-president of Associated Credit Bureaus Inc., the Washington trade group for companies that compile and sell financial data.

Now, it's up to the Senate. Senator Richard H. Bryan (D-Nev.) has introduced legislation similar to the Torres bill, and the Senate Banking Committee is set to vote on it this month. If the committee moves swiftly, a package could reach the President this year.

There's a risk that members of the Senate Banking Committee will do what their House counterparts did: pander to the industry. But the Senators may be less likely to cave in, if only because they are less beholden to key political-action committees. In 1991, the 20 members of the Senate Banking Committee accepted \$118,065 in donations from banking, finance, and credit interests. Most of that money—\$114,000—went to one man: Senator Phil Gramm (R-Tex.). In contrast, the 41 members of the House Banking Committee took about \$600,000 from such PACs in 1991.

Contrary to industry claims, a pro-consumer bill needn't create red tape. Instead, it would allow people to cut through it—and to buy homes or get loans with some dignity. If there's any doubt, just ask Robert Corbey. After much haggling, he was forced to dip into his retirement savings to buy the vinyl siding. "Looking back," he says, "I think I would have been happier with a coat of paint."



CORBEY: A MIXUP BY EQUIFAX'S COMPUTERS TOOK EIGHT MONTHS TO CORRECT

to buy 5,000 homes, 40,000 cars, and 300,000 appliances daily.

Behind the scenes, business groups pushed to weaken the bill. "The credit bureaus, the banks, and the retailers had armies of lobbyists on the Hill," says a congressional staff director working on the bill. "And they got very greedy." The free-report measure, for one, was scuttled. Also scrapped was an effort to ban credit bureaus from selling private financial data on consumers to direct marketers, even though the FTC considers this illegal. Worst of all, a last-minute amendment would have voided all existing and future state laws that have anything to do with credit reporting, including many that ensure privacy.

The Senate Banking Committee is set to vote on a reform bill that could reach the President this year

"Nothing we can do can kill the thing off."



— Bobby Winston, Producer, San Francisco Shakespeare Festival

"In a heavy fund-raising period, we've run our LaserJet 24 hours a day for days at a time. It just will not die," says producer Bobby Winston. "It's truly a phenomenal piece of engineering."

For years, experts have applauded LaserJet performance. In 1991 alone, HP LaserJet printers won *Printer of the Year* from Byte and InfoWorld; *Product of the Year* from Datamation and Byte; *Most Valuable Product* from PC Computing; *World Class* and *Best*

Buy from PC World; and *Readers' Choice* from Publish.

All five models have received many accolades, from the 4 ppm personal LaserJet IIP to the 17 ppm LaserJet III Si. With HP, you can get genuine PCL5 printer language, with scalable typefaces. And HP's exclusive Resolution Enhancement technology, for improved print quality. Prices range from \$1,249 to \$5,495.*



To hear what other customers have to say about HP LaserJet printers, call **1-800-752-0900, Ext. 2988** for a free video. You'll see why the LaserJet is a hard act to follow.

HP LaserJet Printers.



**HEWLETT
PACKARD**

*Suggested U.S. list prices
©1992 Hewlett-Packard Company PE12251



Just this once, we'd like to give our vehicles the image that they deserve.

You won't see our drivers making deliveries in anything like this. However, you will notice the speed at which our delivery service works.

With 70,000 vehicles on the road and as many as 400 planes overhead servicing over five million customers worldwide daily, it's no wonder every

business day we're responsible for doing what no other company can: making more on-time deliveries than anyone in the world.

Which is why, to so many people, our service is already considered up to speed. We run the tightest ship in the shipping business.®



I WANT MY MTV —STOCK

A public offering may be next for the growing music-video network



WORLDWIDE PHENOMENON: A HUNGARIAN WOMAN TUNES IN TO MTV

Maybe it was inevitable. The television network that exults in sound bites is now covering a presidential campaign that is dominated by them. By reporting on the candidates the same way it reports on Guns n' Roses or Def Leppard, MTV: Music Television thinks it can awaken the civic instincts of its 18- to 24-year-old viewers. Says MTV Creative Director Judy McGrath: "They may look like deadbeats to everybody else. But not to us."

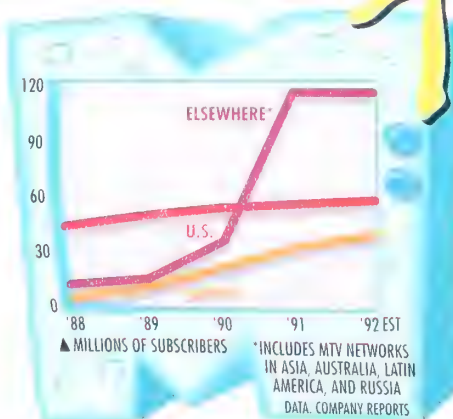
Not to Wall Street, either. MTV executives acknowledge that its parent company, Viacom International Inc., may sell a 10% to 15% stake in MTV Networks to the public. And in a sign of just how lucrative its youthful franchise has become, they say the offering could raise up to \$400 million. That would value MTV at \$2.6 billion to \$4 billion—roughly the same as one of the Big Three broadcast networks. In addition to MTV, the group includes a second music-video channel, Video Hits One, and a children's channel, Nickelodeon. For now, executives say, Viacom is still mulling proposals from several investment banks.

WORLD-BEATER. Some experts on Wall Street say a \$400 million offering would fly. "The broadcast networks are barely making money, while MTV goes from weakness to strength," says Porter Bibb, managing director of investment bankadenburg, Thalmann & Co. He points out that several cable networks have recently gone public at extravagant multiples: "This market seems to have an insatiable appetite for these networks."

Even among fast-growing cable networks, MTV is a sprinter. Twelve years after it introduced music videos to the cultural vernacular, MTV is well on its way to becoming the world's first global TV network. With new channels in Asia, Australia, Latin America, and Russia, it expanded its potential audience by nearly 100 million homes in 1991 (chart). In the U.S., MTV's push to become a full-service network for young people boosted advertising revenues 7.7% in 1991, to \$114 million, according to cable-TV analyst Paul Kagan Associates Inc.

Viacom could use the cash from an offering. The company, which also owns the Showtime pay-cable network, several radio and TV stations, and a syndication unit, is still paying down \$2.4 billion in debt from its 1987 leveraged buyout by

EXPLODING GROWTH



Boston movie-theater magnate Sumner M. Redstone. The company is also spending \$150 million a year on new programming for MTV and its other networks.

Viacom President Frank J. Biondi Jr. won't say whether the company plans an initial public offering. But he notes that it is whittling away its debt and reported its first positive net earnings since the leveraged buyout in the first quarter. Although programming costs are rising, he says Viacom can easily cover them by extending its bank credit lines and by issuing \$150 million in new debt. Says Biondi: "There are arguments for and against a stock sale." For one thing, he says, MTV may fetch even more later: He's predicting a double-digit gain in advertising revenues this year. And Nickelodeon will benefit from NBC's decision to scrap its Saturday-morning cartoons.

FRESH FACES. But investment bankers warn that the bull market for cable stocks won't last forever. The Family Channel, a network owned by televangelist Pat Robertson, and Black Entertainment Television both went public recently at rich price-earnings multiples. Yet they're trading below their offering price, in part because investors are jittery about a bill now before Congress that would regulate cable rates.

Those worries haven't stopped MTV from further expansion. In 1993, it plans to launch two spin-off channels to appeal to the varying musical tastes of its viewers. MTV says it hasn't settled on the musical genres for each channel, which will be called MTV 2 and MTV 3. Still, the network says it wants to be ready for the day when digital compression and fiber-optic technology will vastly expand the number of cable channels.

And lest MTV lose its cutting-edge style, the network is undergoing a Menudo-like casting change. It recently retired thirtysomething veejays Julie Brown and Martha Quinn in favor of fresh faces such as Karyn Bryant and Steve Isaacs. And it's rolling out new programs that tackle issues such as racism and the environment. "We're trying to cover issues that are of more import than just music," says MTV Networks Chairman Tom Freston.

Still, MTV hasn't forgotten what got it into every rec room in America—and millions abroad. Eighty-five percent of MTV's airtime is devoted to music, and its traditional mixture of Michael Jackson and Motley Crüe hasn't changed much. What media mavens are waiting to see is whether the MTV world tour will make a stop on Wall Street.

By Mark Landler in New York, with bureau reports

TASTES YUCKY, SELLS LIKE HOTCAKES

Sour gum, the latest craze among the lunch-box set, is 'puckerlicious'

It was green. It was vile. Her face turned red, her eyes bulged, and her mouth made a God-this-is-awful grimace. Finally, she spit it out. Then, Patricia Mariani, 4, retrieved the offending gum, ran it under cold water, stuck it back in her mouth, and cheerfully chomped away as her sister Shannon watched. "It's more sour than a lemon," says Shannon, 13, a seventh grader at St. Peter School in Point Pleasant Beach, N. J. "I don't really even like it. But it's probably my favorite gum. Whenever I see it, I buy it."

The Mariani sisters are crazy about Cry Baby, a supersour gumball that's the hottest candy to hit the confectionery market in years. The secret? Cry Baby is awful. "Don't quote me, but it tastes like battery acid," says a worker at Philadelphia Chewing Gum Corp., which makes the stuff.

Sour gum is blowing out of stores: One manufacturer estimates the gum will post \$70 million in retail sales this year. That would be a blessing for the \$2.6 billion gum industry, which hasn't had a blockbuster hit since Wrigley's *Extra* debuted in 1984.

EYE POPPERS. "It's the most remarkable thing we've seen in this business," says Martin Pearce, senior vice-president for marketing at Leaf Inc., based in Bannockburn, Ill., which makes the supersour Eye Poppers gum, as well as Chuckles, Milk Duds, Jolly Ranchers, and Heath Bars. "Our difficulty is we've not been able to satisfy everybody."

Indeed, demand for sour gum is so stiff that a "black market" has developed. Steve Smalley, a candy buyer at Kmart in Troy, Mich., has to wait until July or August for his next shipment of supersour Tear Jerkers, made by Ontar-

io-based Concord Confections. "The supply is almost nonexistent," says Smalley.

But that's not stopping his son from getting into the business. "My 13-year old came home with a bag the other night that he'd gotten out of the gumball machine," says Smalley. "He was going to take them to school and sell them for a quarter apiece."

CRY BABY:
ATTACKING
TASTE BUDS



So what's so great about this sour stuff? It makes your eyes water, heart pound, and body sweat—generally unpleasant sensations. "That's because you're an adult," says A. G. Atwater Jr., president of Amurrol, a subsidiary of gum maker Wrigley, which launched a line of sour candies. "Supersour is brutal to begin with. Of course, kids love that."

Why? Although the sour sensation gradually becomes sweet and eventually settles into tastelessness or a mild, tangy flavor, the first

minute of chewing or sucking requires Homeric acts of courage. "How brave are you?" dares a package of Mega Warheads, a supersour hard candy distributed by Foreign Candy Co., which is based in Hull, Iowa. A Warheads package intones, "CAUTION: First 50 seconds are EXTREMELY INTENSE. Hang in there!" That type of scare tactic is very effective, says Teresa Tarantino, editor of *Candy Marketer* magazine. "Kids are challenging each other: 'If you can get through this, you can get through anything.'" She estimates that 50 to 60 companies make supersour confections.

PASSING FAD? There might be another explanation for the masochistic madness. "With sour candies, you can play tricks on your friends," says Ron Sher-

man, a merchandise manager for Mr. Bulky Treats & Gifts, a 148-store chain based in Troy, Mich., where Tear Jerkers are best-selling items at \$5.99 per pound. "You say, 'Hey, do you want a piece of candy?' and then watch their faces get all twisted." Sherman expects to sell \$7 million to \$12 million worth of sour gum and candy this year.

But what's hot today could be totally uncool tomorrow. Chris Burnett, 12, a sixth grader at Lake Bluff (Ill.) Junior High School, started chewing Tear Jerkers a couple of months ago, but he has already given them up. "It's like hot dogs. You stop

after a while," he says.

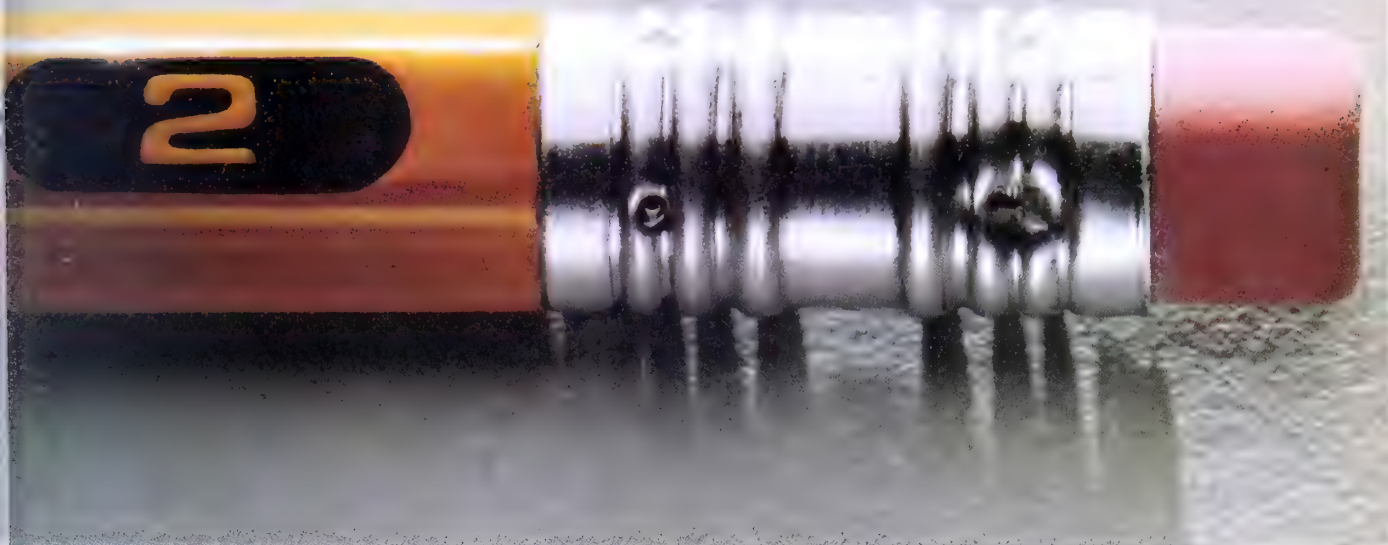
To keep the momentum going, Sherman is test-marketing items such as Spicy Meatball Gum, meatball-shaped gum loaded with red chili pepper. That should pass muster with the gross-

meisters. And Kmart's Smalley urges a reporter to try a Warhead. "Trust me," he says. "Warheads take sour and hot to a new dimension." Then he warns, "But be close to a garbage can."

By Laura Zinn in New York, with Sandra D. Atchison in Denver

THE DEMAND
CAUGHT
SUPPLIERS BY
SURPRISE

In small business, you need something that works all the time.



Keep it simple.



That's why American Express and AT&T announce a single Corporate Card program designed exclusively for small business.

Expect reliable customer service, accurate statements, corporate discounts. And acceptance where and when you need it. Then add the quality and service of the AT&T Network and savings of 10% on AT&T long distance card calls. All consolidated on one monthly billing statement from American Express.

One card to carry. One bill to review. It is that simple.

For more information, call 1 800 531-3934.



CORPORATELINKSM
FOR SMALL BUSINESS

In Business This Week

EDITED BY HARRIS COLLINGWOOD

GUERRILLA AIRFARE

Trans World Airlines has been posting extra-low fares for one day only to boost capacity in selected markets. Usually, the low-price tickets have to be used by mid-June.

But good luck finding these blue-light specials. There's no predicting where the low prices will turn up next—often, they're not even advertised. A sampling of recent one-time-only deals:

	Standard round-trip fare	TWA fare
MIAMI-SEATTLE	\$468	\$298
DALLAS-NEW YORK	290	228
LOS ANGELES-BUFFALO	440	298
CHICAGO-MIAMI	290	228
WASHINGTON-SAN DIEGO	350	298

DATA: BEST FARES

RUNYON TO THE RESCUE AT THE POST OFFICE

► They don't call him Carvin' Marvin for nothing. Marvin Runyon, 67, earned his nickname as the cost-slashing chairman of the Tennessee Valley Authority by axing programs and personnel. Now, he's taking on a bigger challenge: the U.S. Postal Service. On May 5, President Bush named Runyon to head the \$44 billion agency, which faces escalating costs, rising competition, and disgruntled customers. But Runyon, who began 37 years ago at Ford Motor as an hourly production worker and rose to head Nissan Motor's widely praised U.S. car business, is undaunted. "I want to prove that government can run as efficiently as business," he says.

Runyon has experience tackling a hidebound bureaucracy. During four years at TVA, he trimmed the work force by 40%, to 21,000, culled the number of management layers to 8 from 13, and eliminated nonessential programs. Meanwhile, the amount of

power the TVA generated during his tenure grew by 7%.

In his new job, Runyon will have much less flexibility than he did at the TVA, which sets its own rates. The Postal Service, however, must first get O.K.'s from two other panels. While he relied heavily on debt restructurings to lower the TVA's financing costs, he must worry now about managing labor costs, which account for 83% of expenses at the 740,000-employee organization. Worse still, the Post Office ran a \$1.5 billion deficit in fiscal 1991. Given those problems, even Runyon may have trouble putting his stamp on the Post Office.

SEAWOLF GETS A STAY OF EXECUTION

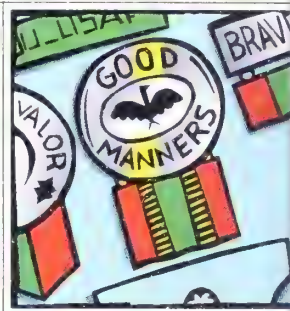
► Defying President Bush's plans to kill construction of two Seawolf nuclear submarines, the Senate on May 5 voted to restore funding for the subs and slash spending for the B-2 bomber and the Strategic Defense Initiative instead. The move was good news for General Dynamics' Electric Boat factory in Groton, Conn., which is building the first Seawolf and had counted on Navy orders for two more of the \$2 billion submarines.

Bush is threatening to veto the Senate's \$8.3 billion spending-cut bill. But many Seawolf supporters expect a compromise resulting in an

FAUX PAS AT 12 O'CLOCK HIGH!

The U.S. Air Force Academy turns out officers, but will they be gentlemen—or gentlewomen—any longer? In a cost-cutting move, the academy intends to abolish the office of Cadet Wing Hostess, an in-house Miss Manners. In 1955, when the academy opened, the hostess instructed the all-male student body in the finer points of calling cards and the quaint Victorian custom of calling on commanding officers.

Today's hostess, Cinda Sue Thorhauer, is more attuned to the perils of etiquette in these supposedly gender-blind times. Example: Does a junior female officer open the door for senior male? Answer: Yes at the academy, no in social situations. Closing the office will save just \$30,000, Thorhauer's salary. That makes Thorhauer take off the white gloves to ask whether cost-cutting is the real motive. "Some people are not really confident with etiquette and decorum," she sniffs.



agreement to fund one more sub. The House has already endorsed that plan.

FRANCE MOVES TO KEEP U.S. AIRLINES IN CHECK

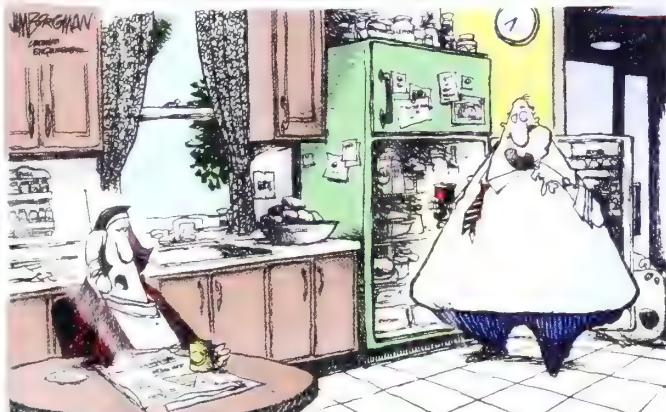
► France has followed through on its earlier threat: On May 4, the country renounced its bilateral air agreement with the U.S., in effect since 1946. The move capped a long-simmering dispute between the two countries over the number of seats U.S. airlines can offer travelers to and from France.

For this summer, France will let U.S. carriers increase seat capacity by 26% over last

year, to 2.4 million seats. But a new treaty may put a lid on the number of seats that can be offered by the eight U.S. airlines flying between the two countries and may restrict the number of countries that U.S. airlines can serve after stopping in France. Now, the airline industry is worried that other countries such as Germany or Japan may follow France's lead and try to curtail the expansion plans of U.S. carriers.

BRINGING DICKENS TO DISKETTE

► Here's something that lends new meaning to the term "computer literate." Random House is publishing 10 titles from its Modern Library collection of classics in electronic form. The series of diskettes with prices ranging from \$19.95 to \$24.95 each, will run on Apple's PowerBook notebook computers. The texts include works by Dickens, Faulkner, Melville, Proust, and Wilde. Software house Voyager performed the conversion from paper to diskette. If reading via PC catches on and the first title sell well, Random House will likely bring out hundred more classics for computers.



"ACTUALLY, HARRY IS SOMETHING OF AN AUTHORITY ON THE FOOD PYRAMID HIMSELF...."

We not only make the heart of your computer system, but the *other* body parts as well.



At Acer, innovative technology isn't limited to our computers.

We've been one of the world's leading monitor manufacturers for years, with a wide range of 14", 15", and 17" models. And now, Acer brings you I-Screen™. A breakthrough that allows you to adjust the color, brightness and resolution of a monitor via on-screen programming – the same way you adjust a TV set. I-Screen is available exclusively on the new AcerView™ 56i and 76i monitors.



AcerGray™ technology makes the new AcerLaser™ IIIIG the world's first PC-compatible grayscale laser printer that gives you 256 shades of gray. Most laser printers only

give you 16. So the AcerLaser IIIIG can print black and white images of startling photographic quality.

Finally, as one of the major players in the computer keyboard industry, we've developed our own membrane "keyswitch."

Which gives our AcerTouch™ keyboards a soft audible click and tactile feel that's not only superior to mechanical systems, but to other membrane systems as well.



Just call 1-800-SEE-ACER and ask about the complete line of AcerView monitors, AcerLaser printers and AcerTouch keyboards.

We'll give you the perfect computer system from head to toe.



If you picture yourself owning a GM vehicle, GMAC announces an alternate way to do it

If you're a GM car or truck buyer who wants ownership *plus* low regular monthly payments, you may want to give GMAC SMARTBUYSM a shot.

SMARTBUY is a new purchase plan* that gives you *another* way to own a car. Like conventional financing, you own the vehicle, so the title is in your name. But what makes SMARTBUY different is that at the end of your contract you have several choices. You can make a final SMARTBUY payment, which is larger than your regular monthly payment. You can refinance. Or return the vehicle to the dealer.† It's your decision.

If you're thinking about buying a GM car or

truck, then picture yourself with more money to spend each month and a new vehicle every few years. Because, with SMARTBUY, that's exactly what you'll get.

See your GM dealer for details. And set your sights on GMAC SMARTBUY.

*SMARTBUY is not available in Nevada. Available with modifications in Maryland, North Carolina, New Jersey, Pennsylvania and Washington, D.C. Limited availability in Arkansas. †If vehicle is returned to dealer, purchaser is liable for excess use, wear, mileage and a \$250 disposal fee.

GMAC SMARTBUYSM

Chevrolet • Pontiac • Oldsmobile • Buick • Cadillac • GMC Truck

WHICH CANDIDATE WILL BE BURNED WORST BY THE FIRES IN LOS ANGELES?

From the strife-torn '60s to the slashing Willie Horton campaign of 1988, race is often the subtext of Presidential elections, discussed by candidates only in loaded code words. But with the shocking verdict in the Rodney King police-brutality case and the ensuing devastation in Los Angeles, race has become a new and unpredictable element in an already volatile campaign. This poses risks for both President Bush and Democrat Bill Clinton.

The conventional wisdom holds that a crisis boosts an incumbent President by giving him a chance to show leadership. And historically, racial tension has played into the hands of law-and-order Republicans. In the end, this year may be no different. But some early reactions to the urban unrest should send a few shivers through the White House.

IN A MINE FIELD. With his slow response to the disorders—three tepid, contradictory statements on the first day of rioting—Bush may have revived voter concerns that he's at sea on domestic issues. A Times Mirror survey found that Bush's double-digit lead of mid-April evaporated right after the riots (table). In a poll taken between Apr. 30 and May 3, the President got the backing of 33% of voters, putting him in a virtual tie with Clinton and Ross Perot at 30% each. In a two-man race, Bush's 46% to 3% lead over Clinton was within the poll's margin of error. By taking the middle ground, [Bush] alienated everybody a little bit," says Republican consultant Eddie Mahe Jr.

Clinton still has a lot of work to do before he can capitalize on the President's slippage. Most of the disaffected Bush backers are parking their votes with Perot. And the riots put the Democratic challenger in a mine field. The White House is linking the horrifying scenes of violence from L. A. to Demo-

cratic support for permissive welfare policies and Great Society handouts. Overlooked in the barrage is a startling fact: As a freshman congressman from Texas, Bush voted for nearly all of Lyndon Johnson's domestic spending initiatives.

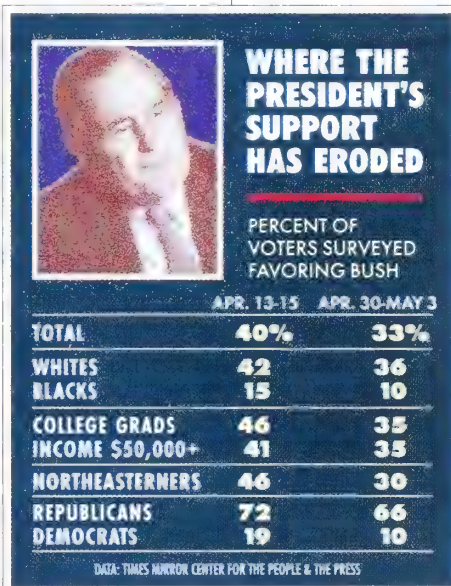
Clinton will make much of that fact, but he must avoid a trap. If he endorses calls for massive inner-city aid, he'll jeopardize his appeal to the middle class and blue-collar Rea-

gan Democrats. But if he ignores urban woes, he could alienate his staunchest backers. "Clinton is on the razor's edge—to keep the black vote and not to lose a fair amount of the white vote," says Atlanta pollster Claibourne Darden.

WHITE FEARS. Clinton is trying to bridge the gap. He tells audiences that it is in their interest to get the poor off welfare, to hold deadbeat parents accountable for child support, and to help tenants in public housing projects to buy their homes and police their neighborhoods. "He is challenging traditional Democratic values," says Democratic activist Mark Siegel. Adds Mike Espy, the first black Democrat ever elected to Congress from Mississippi: "Clinton is preempting the Republicans' divisive strategy."

Playing the race card has been good politics for Republicans. Ads attacking quotas saved North Carolina Senator Jesse Helms in 1990, and assaults on welfare cheats helped elect Kirk Fordice governor of Mississippi last year. Bush strategists won't do anything that crude. But they may use images of L. A. to stoke white fears. Clinton, the racial healer, declares that such naked appeals to racial resentment won't work this time. But not even Democrats cheered by Bush's fresh plunge in the polls are confident that Clinton will be proven right come November.

By Richard S. Dunham and Douglas Harbrecht



CAPITAL WRAPUP

MARKETS

The Securities & Exchange Commission's new complaints about poor record-keeping in the \$3 trillion Treasury securities markets mark the agency's latest move to enlarge its regulatory reach. The agency told Congress that handwritten bid slips and other irregularities hampered its probe of such wrongdoing as last summer's Salomon Brothers Inc. scandal. Chairman Richard C. Breeden says the SEC needs better "audit trails." But Treasury and Federal Reserve officials continue to resist SEC regulatory advances. They say all the agency was able to turn up with 190 subpoenas was a few exam-

ples of "whited-out" entries on bid sheets. Treasury and the Fed fear that additional regulation would drive up the government's borrowing costs.

PRIVATIZATION

Turning government services over to private industry remains popular, but the feds may be about to get one back. Since the Landsat satellite imaging program was taken over by a General Electric/Hughes Aircraft venture in 1984, some prices have gone up by as much as 4,500%. After hearing the screams of angry customers, Congress is pushing for NASA to take the program back or to subsidize the cost to commercial users.

CONGRESS

House Banking Chairman Henry B. Gonzalez seems to be losing his lonely fight to block a Justice Dept. subpoena of records of the defunct House Bank. But his effort may be rewarded next December, when the erratic Texas Democrat is expected to face a challenge to his chairmanship. Although political fear caused them to vote to turn the records over, many members quietly cheered when Gonzalez and Representative Sidney R. Yates (D-Ill.) sought court action quashing the subpoena on separation-of-powers grounds. District and appeals courts have rejected the suit.

KOHL: WE ARE FAR FROM ONE GERMANY

'The main problem of unification is not material, but human'

Only a mile from German Chancellor Helmut Kohl's office, striking workers are blockading the Bonn subway as public-sector employees stage their first national walkout in 18 years. As if that isn't enough, Kohl's center-right coalition is reeling from the surprise resignation several days before of veteran Foreign Minister Hans-Dietrich Genscher. Yet, sitting amid the dozens of model elephants bedecking his teak-and-leather-furnished office overlooking Bonn's Chancellery gardens, Kohl, 62, remains the picture of self-assurance. His response to speculation he might quit after a decade as Germany's leader? "Garbage."

On Apr. 29, the 6-foot-4-inch Chancellor took time out from his labor troubles and other matters for a two-hour conversation with BUSINESS WEEK Assistant Managing Editor Robert J. Dowling, Bonn Bureau Manager John Templeman and Correspondent Gail E. Schares, and European Economics Correspondent Bill Javetski. Seated beneath a portrait of former Chancellor Konrad Adenauer, Kohl spelled out his prescriptions for Germany, Europe, and the North Atlantic alliance.

Q Is the strike weakening your government?

A This strike is no threat to the ability of my government to govern, nor to the economic stability of our country. But it is absurd. Many people in western Germany have not yet fully understood that German unity is not some passing event, but has consequences. We have to do something about our competitiveness. We have to ask ourselves—and unification intensified this—whether we are living beyond our means. We have to concentrate our financial resources, sustain monetary stability and the climate for investment, and bear the financial burdens we took on for eastern Germany, central, eastern, and southeastern Europe, and the former Soviet Union.

Q What is your economic plan?

A We are steering a strict budget course, limiting the rise in government spending to 2.5% a year. We have to get inflation down below 4% this year. Our finances have not spun out of control, and I am determined to keep it that way. You can't win elections in Germany without reasonable economic policy.

Q Are German interest rates too high?

A There are a lot of unfair complaints about the Bundesbank. Long-term interest rates are about the same as in the

problem of unification is not material but human. Over 40 years, we drifted much further apart than we realized. Dictatorship and the Stasi [secret police] marked the east Germans much deeper than we in the west assumed.

Q How do you view Foreign Minister Genscher's resignation?

A It isn't sensational at all. He has been a member of the federal government for 23 years, 18 as foreign secretary. Hans-Dietrich Genscher is now 65, and he's had health problems. There aren't any secrets. If he stays in office, he'll be drawn into the next election campaign at the age of 67. Despite occasional political differences, we've been friends for decades.

Q Wasn't Mr. Genscher most closely identified with East-West relations?

A If you look back over the past 10 years, it is completely clear who was deciding policy on everything important. It was Helmut Kohl who decisively supported implementation of the NATO double-track agreement. Chancellor Kohl has been the driving force for European integration. And it was quite certainly Chancellor Kohl who strengthened the foundations of German foreign

policy: the German-American and German-French partnerships.

Q Will Germany have to take a leading role in Europe-U.S. relations?

A Our demographic and economic position has changed enormously through unification and the collapse of world communism. Our basic political values and vital interests have not. United Germany is part of the West. With 80 million people, we are the most populous country in western Europe. We are the strongest economic power in Europe. We no longer have any excuse for not accepting international responsibility. Take



U.S. My economic policy is directed toward a sound fiscal policy, strict budget cuts, and a reasonable wage policy, so that we can cut interest rates.

Q Did you underestimate the burden of unification?

A Socialism's legacy is very much more devastating in both material and nonmaterial ways than could be foreseen. Everybody, including myself, underestimated the extent to which the economic and, above all, ecological substance of eastern Germany had been destroyed. The state of the railroads and highways is simply unbelievable. However, the main



Europeans and Americans, during the whole cold war period. We are facing challenges from the Third World, from the global environment, for example, destruction of the rain forests, holes in the ozone layer. I cordially invite the Japanese to join their partners in meeting these challenges.

Q *What about the fight in the EC between protectionists and free-traders?*

A There are no more protectionists in Bonn than there are in Washington, and there are at least as many protectionists among the Washington industrial lobbies as there are in Germany. As far as subsidies are concerned, German industry is like U.S. industry. With us, it is coal. Others have the Strategic Defense Initiative and give big research contracts, the results of which are available for private use later.

Q *Why does Europe need common political and defense policies alongside economic union?*

A Economic union cannot work in the long run without a political union. History shows that you can't have a common currency and be completely at odds over fundamental political questions. If the EC, the future European Union, has a common currency in 1997 or 1999, it will need basic agreement on fiscal, economic, and budget policies. You need a European central bank. Those are also political decisions.

Q *European election results show voters are very concerned about immigration. How are you addressing this?*

A Neither Europe nor Germany can solve the problems of the whole world on their soil. Unfortunately, many people who oppose immigration also maintain we should refuse financial aid to these countries. That's stupid. But we made serious errors in Germany because we did not modify our asylum laws fast enough. If people are persecuted on political, racial, or religious grounds, they can still come here any time. This constitutional guarantee will not be changed. [But] when our constitution was drafted in 1948-49, nobody imagined that 25,000 people would come to us in January, 25,000 in February, and 30,000 in March, for overwhelmingly economic reasons.

Q *Are you tired?*

A I'm not tired at all. I don't know what sort of impression I convey after 30 years of 15- to 16-hour days. Sometimes my sons say: "Isn't it crazy what you do?" But I'm not complaining. That's the way I wanted it.

e gulf war. We can't be in the United Nations and then when it comes to obligations say it doesn't suit us. Now, we have to clarify our constitution so we can participate in the U.N. with full rights and duties, and I underline duties.

What is America's role in Europe?

There is a lot of stupid drivel about the U.S. and its alleged weaknesses. The U.S. is the strongest country in the world and will remain so. As such, Americans have to play a decisive role in the world. As German Chancellor, it is part of my job to support you. That doesn't mean that we won't have differences over specific issues. But German-American friendship is a basic condition of the political future of my country. I want to deepen that, starting with security. We need NATO for many more years. I want American soldiers to stay in Germany and Europe. I'd like to see greatly intensified German-American

economic relations. We talk about transatlantic bridges. They have to stay, but they need more lanes.

Q *Can Germany mediate between Europe and the U.S. to extend the General Agreement on Tariffs & Trade?*

A My role is not as an intermediary, but as a German in the European Community, which negotiates through its Commission. We need success in the GATT negotiations because we need free world trade as much as we need air to breathe. Any thought of an economic Fortress Europe is unacceptable.

Q *What should Japan's role be?*

A If we have the same [trade] conditions in Japan as the Japanese have here, I won't have any worries. We have as many gray cells as they do. Japan has to take on more responsibility. They had relatively little to do, compared with the

FEEDING FRENZY ON THE CONTINENT

With a single market emerging at last, the takeover craze has returned

From the spires of the City of London to the glass towers of Frankfurt, dealmakers are dusting off their battle plans. After a two-year lull, Europe is suddenly seeing a surge of buyouts and mergers in industries ranging from cement to banking (table). "I've never picked up so much business in such a short period of time," says Dante Razzano, managing director for Morgan Grenfell Italia in Milan. In the past two weeks, he has received orders from five companies to sell off divisions.

As Europe tears down the remaining barriers to cross-border takeovers, well-heeled players are ready to pounce. With an eye toward slugging it out with Japanese and American rivals, European executives have become almost fanatical about building up their core businesses. As a result, the new acquisitions drive seems destined to lead to far greater industrial competition than previous wheeling and dealing.

Takeover action in Western Europe this year could surpass 1989's record level of \$159 billion recorded by *Acquisitions Monthly*. First-quarter figures are up 57%—to \$43 billion—over last year.

CEMENT MIXINGS. The promise of a unified Europe is drawing even insular executives into deals across the borders. And while friendly banks and shareholders still can gang up to block hostile outsiders in countries such as Germany and Italy, many barriers have already fallen elsewhere. Indeed, the easing of France's takeover regulations was crucial to Nestlé's \$2.3 billion acquisition



of Source Perrier in March.

The late April consolidation in the prosaic cement industry is typical of the latest M&A phase. Plagued by losses, the French financial and industrial group Compagnie Financière de Paribas agreed to sell 45% control of its Société des Ciments Français unit to Italy's Italcementi for \$1.3 billion. In one shot, Italcementi, which dominates the business at home, becomes a \$4 billion combine with a major presence throughout Europe. "It's clear 1993 is upon us," says general manager Roberto Giannini. "We can be the market leader in Europe."

In a move to protect his embattled empire, French financier Jean-Luc Lagardère on May 5 announced plans to merge his publishing company, Hachette, with missile maker Matra, which he also controls. Hachette is laden with debt and losing money from ill-timed me-



MATRA AND HACHETTE ARE MERGING MISSILES AND MAGAZINES

dia buys in the U.S. and heavy support of the now-defunct French TV channel La Cinq. The company hopes to tap Matra's cash trove for help. Yet even Lagardère may have to yield to the potent new forces of change and unload some properties.

In fact, across Europe, economic pressures are forcing managers to dump businesses—or face predators who will do it for them. In some cases, powerful competitors are getting together to poo-

WHO'S DOING DEALS IN EUROPE

ELF AQUITAINE France Joins German companies to invest \$3 billion in Minal-Leuna, a chain of east German refineries and gas stations

HSBC HOLDINGS Britain Plans \$5.5 billion takeover of Midland Bank but faces possible competing bid of \$6.5 billion from Lloyds Bank

HERSHEY FOODS U.S. Picks up 19% of Norwegian candy maker Freia Marabou for \$180 million

ITALCEMENTI Italy Gets controlling 45% stake in France's Ciments Français for \$1.3 billion

LUFTHANSA Germany Combines its hotel chain, Kempinski, with Air France's Meridien hotels

NESTLE Switzerland Acquires France's Source Perrier for \$2.3 billion

RALSTON PURINA U.S. Pays \$233 million for Hanson's British Ever Ready battery business

overhead costs in peripheral businesses, a trend that's likely to accelerate. That's happening with Air France and Lufthansa, which plan to merge their four-star hotel chains—Meridien and Keminski—to share marketing and reservation costs.

In others, the fallout from big-company mergers is throwing up opportunities or newcomers. Apax Partners Ltd., a \$1 billion investment fund, paid \$78 million in March to British energy giant British Castrol PLC for a collection of heavy industry operations the company had picked up in a 1990 acquisition. "We think we are buying at the bottom of the cycle a company with strong market share across Europe," says Apax Chairman Ronald Cohen.

REATH EASIER. In Britain, fears that a labor government would crack down on mergers put many deals on hold. Now, with Prime Minister John Major reelected and the economy finally stirring, the floodgates have opened. "All of the uncertainty is out of the way," says Charles Irby, a director of Baring Brothers & Co., a British investment bank, which has recently put together \$7.4 billion in potential deals, including Lloyds Bank PLC's attempt to take over rival Midland Bank PLC.

But nowhere is the merger frenzy gathering more steam than in Germany, where reunification and restructuring for global competition last year pushed merger and acquisitions activity to record levels of nearly 2,000 deals. Many postwar managers of the vital midsize companies known as the *Mittelstand* are nearing retirement and worrying about their companies being squeezed by the competition of "1992." The challenge, say management experts, may be to acquire or be acquired.

American acquirers are also hustling to keep from being left out of the big party they expect with the arrival of the single market. Companies such as Hershey Foods Corp. and Ralston Purina Co. have recently filled in their global product lines in candy and batteries, respectively, with buys in Western Europe.

Of course, blending all of the cross-border deals into smoothly running companies could prove difficult. And the question remains how far and fast the merger Task Force of the European Commission—a new factor in the takeover equation—will allow things to proceed. A strong clue may be forthcoming. Markets are abuzz with rumors of a possible combination of Volvo and Renault truck and auto operations. How regulators tilt will signal whether dealmania is officially blessed as European policy.

By Richard A. Melcher in London, with Neil E. Schares in Bonn, Stewart Toy in Paris, and John Rossant in Rome

ITALY

THE SINS OF ITALY'S 'MORAL CAPITAL'

News of a vast bribery network in Milan is shaking Italian politics

Far from the Mafia strongholds of Sicily and the Machiavellian politics of Rome, the Italian financial and industrial powerhouse of Milan has stood tall as the country's "moral capital." That was before Mario Chiesa, head of the city's largest publicly funded nursing homes, was arrested in a sting operation last February as he tried to pocket a \$5,600 bribe. When investigators discovered more than \$14 million in Italian and Swiss bank accounts controlled by him and his parents, Chiesa started to talk. Following his leads, investigators uncovered evidence in early May of at least \$130 million in bribes and commissions paid to Milan politicians.

And that, say prosecutors, may be just the beginning. With Operation Clean Hands two months old, already 20 politicians and businessmen have been arrested, including a former top executive of Fiat-controlled Cogefar Impresit, Italy's largest contractor. The investigators believe that commissions as high as 20% have been paid systematically to politicians on nearly every large public works project in Milan, from hospital and stadium construction to the city's sparkling new Metropolitan subway. Over the last decade, many such commissions were recycled through as many as 70 banks based in the nearby Swiss city of Lugano. "The extent of the corruption that we're beginning to see is simply beyond belief," says Stefano Micossi, chief economist of Confindustria, the powerful employers' federation.

As in the recent wave of scandals that swept Japan's leadership, Clean Hands has laid bare cozy links among politicians, businessmen, and bureaucrats. In fact, Italy and Japan have a number of things in common. Both have highly protected local markets, encouraging collusion between business and politicians. Like the Mafia in Southern Italy, the Japanese *Yakuza* hold sway over the periphery of business. And in Italy, as in

Japan, there is no real opposition to the major political parties, nor any tradition of housecleaning at the top.

But unlike Japan, the Italian party system is fast breaking down. In April elections, regional protest groups gave the Christian Democrat and Socialist politicians an unprecedented drubbing. Prosecutors say this makes it easier to pursue such politically sensitive investigations as Clean Hands.

FRONTAL BLOW. The 150 business executives interrogated so far in the Clean Hands investigation have been more explicit about bribe-paying than in any other corruption case in postwar Italy. Already,

the politician who had been expected to head Italy's new government, Socialist Party boss Bettino Craxi, is fighting for his political life. No charges have been brought against Craxi, but his brother-in-law and most trusted ally, a former Milan mayor, is under investigation on corruption charges. So is the current Minister of Tourism, another Craxi intimate. Both men deny wrongdoing, but Italy's Socialists have been dealt a frontal blow.

Clean Hands has revealed in detail how big contractors would agree beforehand on who would win a deal, such as the \$110 million project to modernize Milan's San Siro soccer stadium in time for the 1990 World Cup. Similarly rigged bidding occurred on Milan's Metro, where work first estimated at \$260 million ballooned to \$1.7 billion.

As a key member of a united Europe, Italy can no longer afford such practices. The annual cost of bribes and kickbacks is now more than \$8 billion, by one estimate. Stanching that flow would mean ending the stranglehold by political parties on more than 3.5 million public-sector jobs and their control over public works and huge swaths of state-owned industry and banking. But history shows that reform doesn't come easily in Italy.

By John Rossant in Rome



CRAXI'S CAREER IS AT STAKE

IF THE EX-SOVIETS WANT AID, 'THEY'D BETTER PLAY BALL ON NUKES'

Like children squabbling over an inheritance, Russia, Ukraine, Kazakhstan, and Belarus have been bickering for months over who gets the former Soviet Union's nuclear arsenal. The fearsome shadow that Mother Russia casts over the weaker states is making them reluctant to stick to earlier agreements to dispose of their weapons.

The Bush Administration is trying to craft a new deal, but concern is mounting. The stalemate could undermine U.S. support for technical and financial help. Some senators are already pushing to link arms control and aid. "If they want aid and access to the World Bank and International Monetary Fund," warns a Senate Foreign Relations Committee source, "they'd better play ball on nukes."

Failure to resolve the nuclear status of the new states could derail ratification this year of the Strategic Arms Reduction Treaty (START), which the U.S. and the Soviet Union signed last July. Experts say it's important to follow through on the treaty and extend it to the smaller states. Otherwise, there will be no framework for disposing of warheads, which could fall into renegade hands.

WAVERING. Worried about future Russian domination, the smaller states are already playing a dangerous game of using their weapons as bargaining chips. Kazakhstan President Nursultan Nazarbayev, who will visit Washington on May 19, wants his country to be designated a "temporary" nuclear power—that would hold on to its weapons until 1999. And Ukraine wants security guarantees from Washington against possible attacks from Russia. All three states have pledged to turn over their tactical weapons to Russia for disposal, but together they retain about 350 long-range ICBMs.

Washington prefers to deal with Russia as the Soviet successor. But the latest U.S. proposal aims to soothe the fears

of the three weaker nuclear republics by letting them join Russia in signing START—if, in exchange, they agree to eliminate all weapons on their soil at once. While all four republics initially agreed, U.S. officials say, they are now wavering.

The Administration's patience is wearing thin. Given the tight congressional calendar, the President must send START to the Senate by early summer for the treaty to be ratified before the election. But Republican senators are warning the White House that the Senate will not consider ratification without a new protocol that commits the smaller states to junking their nuclear weapons.



NUCLEAR SUB: WARHEADS AS BARGAINING CHIPS?

BIG HINT. The U.S. has political and economic leverage to push the new states to accept a deal. For starters, a rift with Washington would reflect badly at home on the leaders of the four republics, says one Administration official, because they "have put a high premium on demonstrating that they can manage the relationship with the U.S. and get things out of it." While U.S. policymakers don't make disarmament an explicit condition of economic and technical aid, they're counting on Ukraine and Kazakhstan to take the hint.

The Administration's marked pro-Russia tilt may have encouraged smaller states to retain their nukes to make the world take them seriously. Belatedly, the U.S. is starting to court them—emphasizing potential economic ties. Like it or not, the U.S. has an enormous stake in seeing that smaller states eliminate their weapons. "If they hold out, it would undercut our nonproliferation efforts everywhere," says Jack Mendelsohn, deputy director of the Arms Control Assn. That scary prospect would make the quarreling among the former Soviet republics look like child's play.

By Amy Borrus in Washington, with Roma Ihnatowycz in Kiev, Deborah Stead in Moscow, and Bill Javetski in Paris

GLOBAL WRAPUP

EUROPE

Why is the base price of a Ford Fiesta \$10,870 in Greece but only \$7,100 in Luxembourg? European Community trustbuster Leon Brittan thinks European carmakers' tight control of the distribution system is largely responsible.

Brittan would like to end the exemption from free-competition rules that keeps the prices up. Either that, or enforce a law that limits price variations between nations to just 12%. While the odds are against Brittan's prevailing, he got help from a recent EC court ruling that allows independent companies to buy new cars in cheap markets

such as Belgium and resell them in high-priced ones such as France, Spain, and Britain.

CHINA

Despite U.S. opposition, China is winning back the confidence of world financiers. At the Asian Development Bank (ADB) meeting in Hong Kong on May 4, the Export-Import Bank of Japan disclosed a \$5 billion loan to China to finance more than two dozen energy-related projects. The deal marks the first major financial aid to China since the Tiananmen Square crackdown in 1989. U.S. officials suggest that China, which runs a \$12 billion surplus with the U.S., does not

need loan concessions. The U.S. also rejected calls by Japan and other ADB members to add roughly \$30 billion to ADB's capital on grounds that some of it was earmarked for China.

ISRAEL

Recent polls show there is a growing chance that the Labor Party will oust conservative Prime Minister Yitzhak Shamir in the June 23 general elections. Labor seems likely to get a huge boost from Soviet Jewish immigrants, who favor it by 3 to 1 over its rival, the Likud. A Labor win would be a victory for the Bush Administration, which considers Shamir a roadblock to successful Arab-Israeli talks.

Terri Guthrie May Never Win A Nobel Prize, But Maybe One Of Her Students Will.

There's not a Nobel Prize for teachers, but Terri Guthrie of Jackson Middle School in Titusville, Florida, is good reason for creating one.

In just her second year of teaching, Ms. Guthrie has mastered a rare skill—the ability to make a seemingly dry subject (in her case, Earth Science) exhilarating.

She attributes much of her ability to the four weeks she spent at the Academy for Teachers of Science and Math at the University of Tennessee. It's an intensive, hands-on program that teaches how to motivate students in personal and imaginative ways.

As a major Academy underwriter, Martin Marietta is proud to join government and academia in supporting President Bush's critical educational initiatives.

And we're even prouder to know that thanks to Martin Marietta Fellows like Terri Guthrie, more students are getting turned on to math, science and the environment.

Who knows, one may even some day win the first Nobel Prize. For teaching.

MARTIN MARIETTA

MARTIN MARIETTA CORPORATION, A DIVISION OF MCDERMOTT INTERNATIONAL CORPORATION



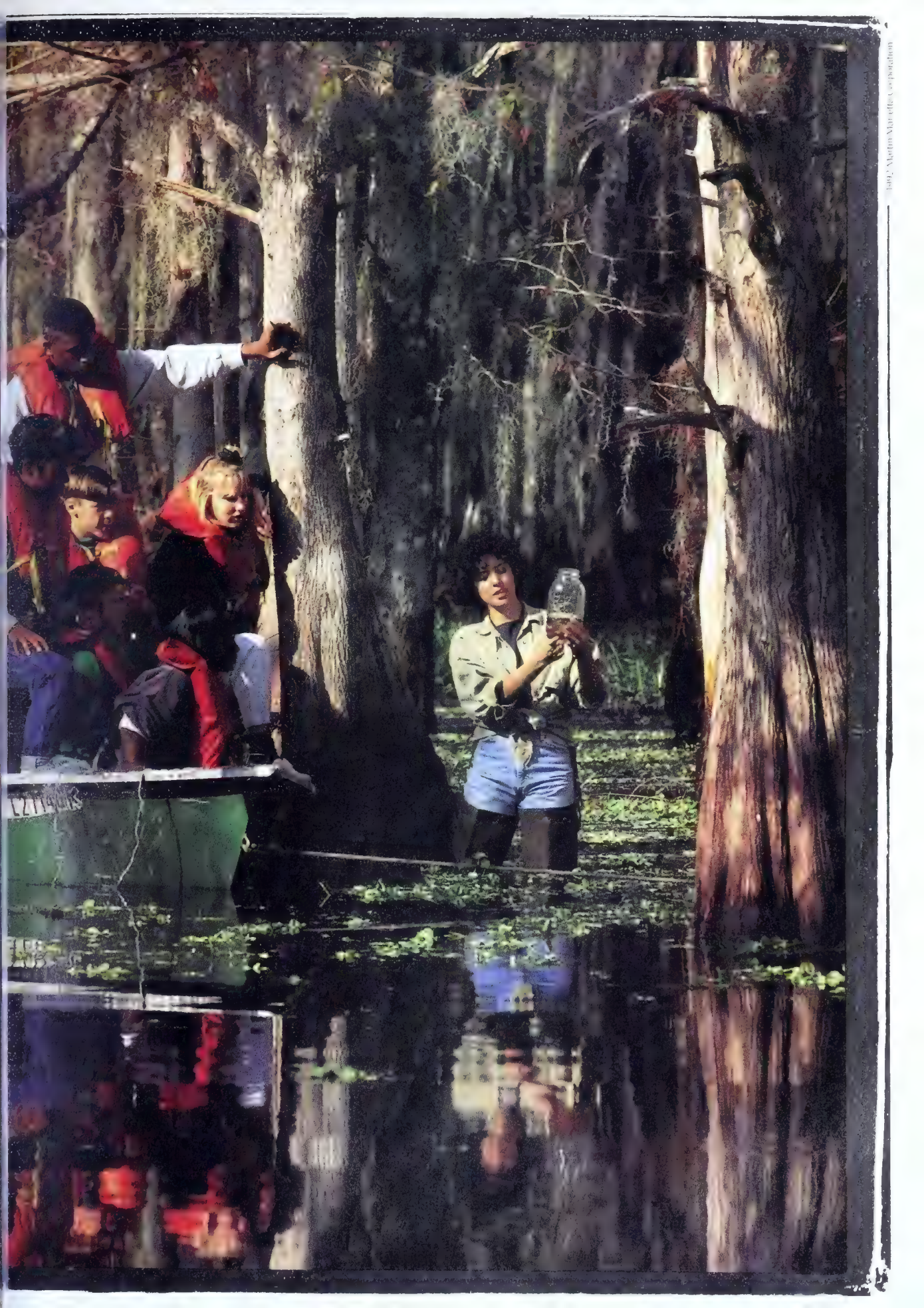




Photo by Peter J. Maerz

I grew up in the Rocky Mountain west, where abundant wildlife and wilderness were a part of everyday life and an important part of my growing up. This was a world shaped by forces other than man, a world in which we shared the experiences that influenced the Americans of the early frontier.

Today, few Americans are privileged to live close to wildlife and wildlands. Most Americans live in or near cities, far from the antelope, elk, and deer of the mountain country. Still, a new environmental consciousness is growing, and a concern for wildlife has extended beyond our backyards to touch every part of the country and the world. But it is not enough.

Americans need to understand the critical importance of wildlife as a gauge of the health of our environment. We need to understand that a healthy environment is essential to our own survival. And we need to understand why wildlife conservation is important for our economic well-being.

We once depended on wildlife for food and clothing. Now, there are a myriad of reasons for preserving wildlife. The diversity of the world's wild animals and plants is a largely unexplored genetic library on which the future of our food production and pharmaceutical industries rely. The wildlands essential to the survival of the world's wildlife - from the rain forests of the Amazon to the tundra of the Arctic - are crucial living components which sustain the life-giving systems of our planet. The destruction of wildlife could well leave the Earth unlivable. Protecting wildlife is not just protecting God's handiwork in nature, it is protecting human life as well.

Can we survive without wildlife? Perhaps. But why would we want to? We have so much to gain from our only other option - living in harmony with our world's diversity of wild creatures.

SENATOR TIMOTHY E. WIRTH
Colorado



George Schaller on the Tibetan plateau at 17,000 feet

Right: Tibetan antelopes



Chang Tang—the name means northern plain in Tibetan—is high, austere, and largely unexplored. Rolling away to the horizon, its immensity is broken only by snowcapped ranges. Vegetation is scant, with neither shrubs nor trees to break the expanse. Just a few nomadic herdsmen inhabit the fringes.

Wolves still prowl the plains and snow leopards stalk their prey among the crags; wild yaks forage on the hillsides and herds of Tibetan antelopes migrate over unknown paths. This is a landscape untouched by civilization, virtually the same today as it was over a hundred years ago.

George Schaller, science director

“We have the chance to save one of the last unspoiled ecosystems on our planet.”

George Schaller

for its survival. And now Schaller and his Chinese and Tibetan colleagues have helped establish a huge reserve in the Chang Tang.

Although the reserve is already the size of Arizona, they hope to expand it to conform to the migrations of antelopes and yaks.

There, Tibet's last great herds can roam free, and the nomads can maintain their traditional culture.

Schaller explains, “If we don't protect the Chang Tang now, the magnificent species found here could soon vanish forever.”

Under such harsh and remote conditions, the right equipment is not only important, it's imperative. Which is why George Schaller

wears a rugged Rolex Oyster Perpetual timepiece.



Site of the Chang Tang Reserve in the Tibet Autonomous Region

of Wildlife Conservation International, has spent four decades in wild and rugged places, studying wildlife, and fighting



ROLEX

Rolex Oyster Perpetual Explorer in stainless steel with matching Oyster bracelet
Write for brochure. Rolex Watch U.S.A., Inc., Dept. 639, Rolex Building, 665 Fifth Avenue, New York, N.Y. 10022-5383
Rolex, Oyster Perpetual, Explorer and Oyster are trademarks.



THE CLOCK IS RUNNING.

In the time it takes to move your eye to the end of this paragraph, another lifeform — an entire species, likely that of a small invertebrate, possibly nameless for being undiscovered — could disappear from this planet.

Scientists say the world is losing up to 140 plant and animal species a day. Terminated. Exterminated. Snuffed out in their shrinking, fractured, poisoned lairs. Each a small, lonely, quiet death in the cosmic scheme of things, but in aggregate one giant and raging hole in the tapestry of life. Yes, everyone knows that extinction is forever. Yet there are many among us, in government and business, in cities and on farms, who, apprised of the end of this species or the endangerment of that one, will wonder why it should matter. After all, they will ask, *what good was it anyway?*

The question is as old as our undeclared war against wildlife. No doubt it was asked in the numbing emptiness left by the passenger pigeon, the Carolina parakeet, the giant lemur, the Caribbean monk seal, the great auk, the Guadalupe storm petrel, the labrador duck, the heath hen, and the ivory-billed woodpecker. *What good were they anyway?*

In the United States today, more than 500 species of plants and animals are listed as endangered, meaning they are in danger of becoming extinct throughout all or a significant portion of their range; or threatened, meaning they are soon likely to become endangered. Unless we can find a way to put our clocks back on nature's time, how long will it be before skeptics are asking the old question about species still tenuously with us? About the panther in Florida. The wolf in Minnesota. The grizzly bear in Montana. The wood stork. The cave shrimp. The gray bat. The desert tortoise. The southern sea otter.

After the Industrial Revolution, the Ark was never the same. Now some scientists envision an apocalyptic future in which one out of five of the species currently with us will be gone by the end of the next decade.

TEXT WRITTEN BY JOHN G. MITCHELL



Technology Is Not A Dirty Word.

Technology. It's brought such progress, but at what cost? It's poisoning our environment—a great crisis of our time. This problem is linked to the problem of efficient energy use: to solve one you must solve the other. We're solving both. We've been at it for years, developing some of the most advanced techniques in the world to turn technology inside out. And make it what it ought to be: a clean clear word that works for the earth.



MITSUBISHI
HEAVY INDUSTRIES, LTD.

*Developing technologies that
work for the earth.*



WHY IS IT HAPPENING?

How? Where? We look for easy answers. We think back to simpler times when men slew animals directly. The word for it was "overkill." In the 19th century, overkill almost wiped out the American bison, and only a shift in fashion saved the bison from oblivion. Thank heaven for silk hats.

But where are the silk hats to save the creatures threatened by 20th century overkill? Human demand for meat, hides, horn, and ivory still imperils the Earth's elephants, whales, rhinos, and wild birds. Commercial fisheries are severely depleted from overfishing throughout the coastal waters of the seven seas.

Damage assessments get tougher to tally when one stops counting carcasses and tries instead to measure the larger cause of this crisis. For the larger cause is clearly the loss of habitat — the fragmentation, degradation, and outright destruction of the kinds of places wildlife needs to survive:

■ Tropical rain forests, repositories of the greatest biological diversity on Earth, are disappearing at the rate of a hundred acres a minute. Worldwide, the annual loss is probably equivalent to an area the size of the state of Georgia, or more than 10,000 square miles.

■ Temperate forests are shrinking at a slower rate, if only because there are not that many left to chip at. In the coterminous United States, less than 10% of the old-growth forests remain intact.

■ No one has accurately calculated the loss of wetlands and grasslands worldwide. In the U.S., outside Alaska, half the wetlands present 200



years ago are gone, and so is all but the tiniest patch or two of the tall-grass prairie.

No doubt it would rest easier upon the human conscience if habitats and ecosystems were capable of self-destruction. But they aren't. Over the long haul, it takes a change of climate to destroy habitat; over the short term, all that it takes are people. In round numbers, world population is growing by more than 90 million people annually. That's enough new faces to add another Mexico to the world every year. Most of this growth is occurring in developing nations, where crowded communities spill outward to the countryside. In the Brazilian State of Rondonia, south of the Amazon, the head count jumped from 110,000 to a million in eleven years, 1975-1986. Over the same period, the newcomers' enthusiasm for slash-and-burn agriculture upped the ante on the deforestation of Rondonia from 500 square miles to nearly 7,000.

And where are the silk hats to save the creatures whose turf, however spatially intact, may yet be tarnished by the excess of human activity? Such as the 75 billion tons of soil eroding each year from the world's croplands, the 30 billion tons of mine wastes laden with heavy metals, the immeasurable billions of tons of livestock manure and untreated sewage choking the life from lakes and rivers, of toxic leachates, of irrigation salts, of sulfur and carbon and nitrogen emissions sufficient to turn the rain into acid and the climate of the Earth into a budding hothouse.

Yet who would dare ask of the Earth — *What good is it anyway?*



Our readers learn about
the environment from some
remarkable teachers.

NATIONAL GEOGRAPHIC

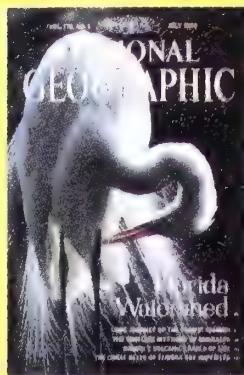
With over 100 years of
experience studying and
reporting on the earth, no
other magazine offers
advertisers a more credible
forum on the environment.

Before you place another

ad, call Joan McCraw, V.P.

Advertising Director, at

212-974-1724.



*Australian Aborigine elder
Photograph by Belinda Wright*

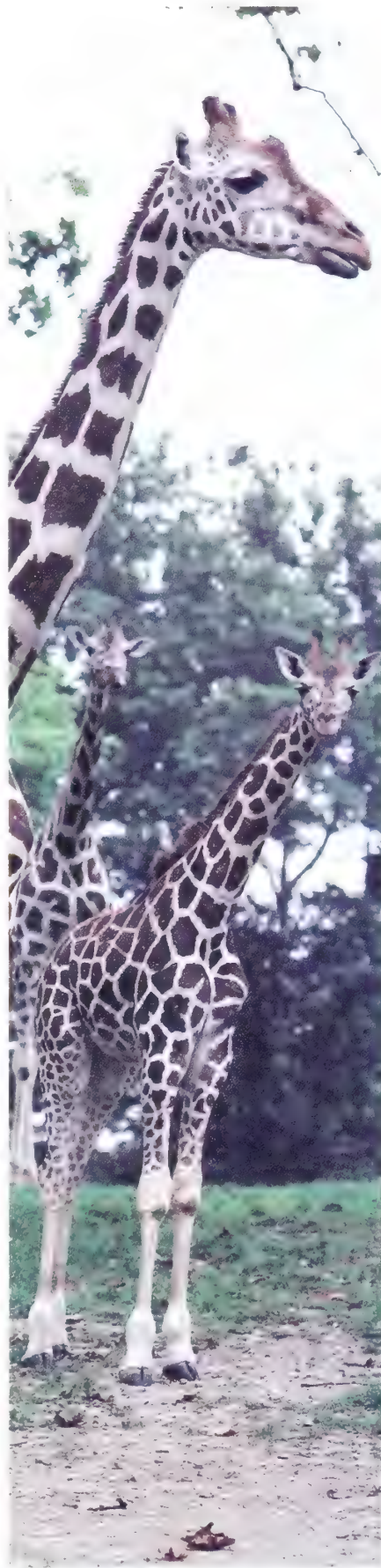
In 1948, a remarkable volume called *Our Plundered Planet* appeared in the bookshops of America. It bore the byline of one Fairfield Osborn, and the National Education Association voted it "the most important book" of the year. At the time, Osborn was president of the New York Zoological Society, an institution his father Henry, the paleontologist, had helped to launch just before the turn of the century. The book was important because, in its forceful and eloquent way, it broke new ground. It linked the zoologist's traditional concern for wildlife conservation to the larger crisis of burgeoning human numbers in a world of diminishing resources. Nature, wrote Osborn, is not unlike a machine one dismantles at his own peril:

*Each part is dependent
upon another, all are related to the
movement of the
whole. Forests, grasslands,
soils, water, animal life — without one
of these the earth will die.
will become
dead as the moon....*

Like Osborn and his book, the New York Zoological Society (NYZS) has been preaching and practicing ecological stewardship in order to keep the moon in its proper place — in the Society's case since 1895, which was long before the word "ecology" became fashionable or even appeared in a dictionary.

WILDLIFE CONSERVATION INTERNATIONAL

The NYZS's far-flung agenda still catches some people by surprise. Chances are, they're thinking of some conventional, oldstyle, stay-at-home zoo, rather than this singular institution that not only manages to operate *two* modern zoos — with two



Baringo Giraffe

more on the way — and an aquarium in the nation's largest city, but also operates, through its global outreach division, Wildlife Conservation International (WCI), more than 140 different projects in 45 nations around the world.

Basically, the WCI mission is threefold: First, to gather the field research necessary to devise long-term conservation strategies; second, to establish and help maintain parks, sanctuaries, and ecological reserves; third, to train local scientists to work in their own countries. "We're field-based," says WCI Director John Robinson. "We don't sit around in New York making decisions on how to manage a resource. We try to figure it out based on the knowledge out there."

And out there is where the action is — in wildlife habitat. Over the years, WCI has been instrumental in establishing nearly 100 parks and reserves worldwide. Among the more recent and notable landsaving initiatives:

■ The Mamirauá Ecological Preserve, 5,000 square miles of varzea (flooded forest) in the Upper Amazon region of Northwestern Brazil. One of the most biologically diverse regions on earth. A breeding ground for 500 species of fish, for howler monkeys, and red-faced uakaris. Protected by the State of Amazonas as a result of research by WCI Research Zoologist Márcio Ayres.

■ Chang Tang Reserve, more than 100,000 square miles of high Tibetan Plateau country, the largest protected area in the world outside of the Arctic. Home range of the snow leopard and the Tibetan bear. Protection agreement negotiated by WCI Director for Science George Schaller.



The latest development in
advanced technology:

Back to Nature

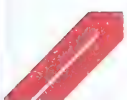
In nature, nothing goes to waste. By-products from one organic process form the essential ingredients for another—and so it goes, around and around the ecosystem. NKK is applying these same principles at our new steelworks, minutes from downtown Tokyo.

The steel plant recycles waste heat and by-product gases to reduce fuel consumption and CO₂ emissions, and recirculates over 95% of the water it uses.

The by-products from manufacturing are recycled as reactants in the plant's state-of-the-art flue-gas scrubbing systems. As a result, sulfur and nitrogen oxide emissions are far below already stringent municipal limits and among the lowest of any major steel plant in the world.

Compounds removed by the scrubbers are recycled into fertilizers and other useful products. Furthermore, 99.5% of all waste products are recycled, saving resources and underscoring NKK's commitment to clean air and water.

"Clean and Green" industrial processes developed by NKK are showing that nature's own principles can enhance today's technology... for greater harmony with the environment.



NKK

NKK CORPORATION

Headquarters: Tokyo

U.S. Subsidiary: NKK America Inc., New York, Washington D.C.,
Detroit, Houston, Los Angeles, Santa Clara

U.S. Affiliates: National Steel Corp.,

Principal Overseas Offices: Vancouver, Rio de Janeiro, London,
Dusseldorf, Rotterdam, Beijing, Hong Kong, Bangkok,
Singapore, Jakarta, Taipei, Al-Khobar

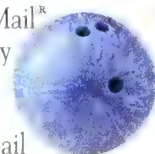


Think of it as a moving van for just \$4.50.



Go ahead, fill it up. One giant poster or one thousand reports. Even packages that weigh up to 70 pounds. It makes no difference to us.

Because we'll pick up all of your Express Mail[®] and Two Day Priority Mail[™] packages for only \$4.50. And that's per pickup, not per package.



Not only will you enjoy door-to-door service, but we'll guarantee next morning delivery* of your Express Mail packages for some of the lowest prices around. And when you have to get it there fast, but not overnight, Priority Mail service delivers two pounds in two days† for just \$2.90.

So when you need a pickup, call the U.S. Postal Service at 1-800-222-1811. And get packing.



For pickup:
1-800-222-1811





■ And in Kenya and Tanzania, WCI's Africa Regional Coordinator David Western and Research Zoologist Patricia Moehlman are working with local agencies and landowners to establish safe migration corridors for the region's wildlife.

In many respects, WCI's training mission is as important as its role in landsaving, the theory being that a park or reserve is only as safe as its indigenous stewards can make it through scientific understanding.

In Tanzania, Tanzanians trained by Patricia Moehlman are monitoring the rare black rhinoceros, measuring the impact on wildlife of tourism, and documenting the populations and movement patterns of elephants and wildebeest. Almost every regional WCI initiative involves some level of effort to train a new generation of professionals to work in their own countries.

Presiding over all of these initiatives, as well as the Society's programs at home, is William Conway, the general director of the NYZS for

26 years, one of the world's most eminent conservationists, and a singular voice of authority and reason on a wide range of wildlife and habitat preservation issues. A veteran ornithologist and wildlife writer in his own right, Conway believes that contemporary zoological parks and aquariums have their work cut out for them — as “caretakers of life in an age of extinctions.”

At a gathering of zoological executives not long ago, Conway described the crisis and the challenge of wildlife conservation in a world besieged by human overpopulation and environmental degradation:

Unhappily, even the most extensive efforts at habitat preservation no longer assure species preservation without ongoing help and intervention.... Institutional repositories, the science and technology being developed in support of [species survival plans], reintroduction, and translocation are essential to warranting that such habitat as is preserved or restored will be able to support at least a remnant of the wildlife community with which it was originally endowed....

Snow Leopard



Not everyone in the environmental community is comfortable with what Conway calls “the propagation imperative” — the idea that rare creatures might be bred in the captivity of zoos or survival centers, so that their young can be reintroduced, if possible, to some intensively-managed relic of the animal's original habitat. Some critics contend that the propagation imperative cannot succeed, while others believe it should not even be attempted.

In the face of such skepticism, scientists like Conway, and James G. Doherty, general curator of the New York Zoological Park in the Bronx, are only too happy to counter with some good-news examples of captive breeding efforts that so far seem to have worked:

■ The Arabian oryx, long considered extinct in the wild, was successfully reintroduced into Oman and other Middle Eastern locations in the early 1980s from captive breeding stock in the U.S. Calving in the wild more than doubled the Oman herds' numbers in six years.

■ The black-footed ferret, that cagey bandit of the Northern Plains, our continent's rarest mammal, numbered about eighteen individuals in 1985. Breeding in captivity, the animal reached a population of more than 200 last year, enough to justify its reintroduction to the grasslands of Wyoming.

■ And the California condor. Two birds from a captive breeding population in the Los Angeles Zoo were released earlier this year into the wilds of Los Padres National Forest. Only time will tell whether or not this effort is successful.

“If we can maintain both the animal and its habitat,” says Doherty of the NYZS, “and the people who live near that habitat want the

Global computing.



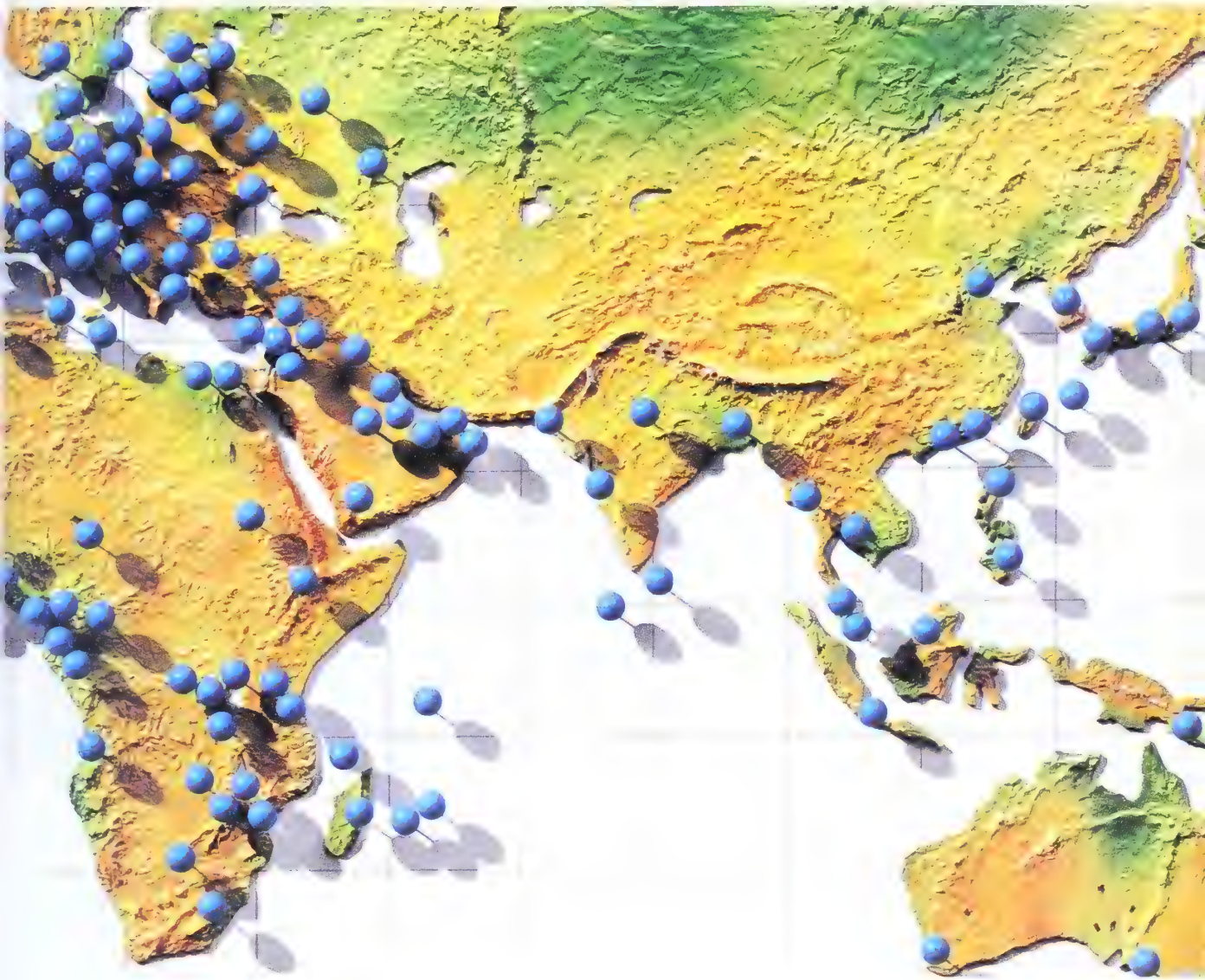
What you need today

Somehow the word "foreign" seems foreign these days. The world is smaller, so people are thinking bigger, beyond borders.

Yet cultures will always be different, and that's the paradox of international business—the need to be global and local at the same time.

At IBM we're old hands at it, and much of what we've learned can really help you.

Being local. We do business in over 130 countries, and our offices are staffed and run by people who were born there. IBM Brazil is Brazilian. IBM Italy is Italian. So they understand not just your



an international business machine.

technical needs, but your marketplace and, most of all, your industry. Which can help you avoid costly (and sometimes embarrassing) mistakes. Also, we can help you find things near your locations and customized for your market. So your software in Taiwan speaks Chinese, and your cash drawers in France will fit franc notes.

Being global. Of course, your global operations can't be islands, you have to manage the whole. And we'll help you do it. Our branches may be local, but they're all on the same team, and they'll support you in a consistent way no matter where you go.

For example, Woolworth, Burger King™ and

3M™ use our Selected International Account program. It helps them bridge cultural, legal and technical differences by providing a single point of contact that aligns IBM's worldwide presence with theirs.

We can also help you communicate, whether you have your own global network or hook into ours. The IBM Information Network makes it easier to connect more than 90 countries for electronic mail, EDI and more. You can even pay in one currency.

To learn more, call our International Marketing Information Desk at 1 800 IBM-1774.





animal back and are willing to protect it, then we can continue to succeed with captive breeding and the reintroduction of species to the wild."

And yet, in a variation on the old theme, some folks will still ask: *Why bother?*

WHY BOTHER?

There are a lot of reasons why an increasing number of individuals — and organizations like the NYZS — are bothering to keep the moon in its proper place and some wildlife in the little wild remaining on Earth. One often hears of ethical motivations, of reverence for life, of bowing to the ineluctable fact that every

THE BOTTOM LINE

Large lessons are writ upon the bottom line. In an essay on the importance of preserving biological diversity, John C. Ryan, a research associate at the Worldwatch Institute, sketches just a few of them: "*Time after time, creatures thought useless or harmful are found to play crucial roles in natural systems. Predators driven to extinction no longer keep populations of rodents or insects in check; earthworms or termites killed by pesticides no longer aerate soils; mangroves cut for firewood no longer protect coastlines from erosion. Diversity is of fundamental importance to all ecosystems and economies.*"

to pick out anything by itself, we find it hitched to everything in the universe."

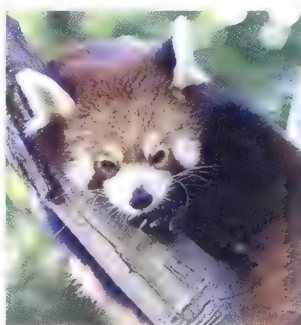
Big universe, small world. This very morning, when I tried to pick the morning newspaper out by itself, I found it hitched to the task of the moment and of the day. For here is a headline that tells me that the health drug industry is "going back to nature." Here it says that pharmaceutical scouts are "scouring the oceans for algae, the soil for fungi, and the jungles for plants, insects and beasts that might provide chemicals to fight cancer, AIDS, and other diseases." Chemical prospecting, the article tells me, could provide "an



Rhinoceros



Iguana



Red Panda



African Elephant

creature, however tiny or unattractive to the human eye, is the product of millions of years of evolution and therefore genetically unique.

One hears, too, of aesthetic reasons, especially when it happens, as it often does, that the animals to be saved are not unattractive to the human eye. The planet, it is said, would be a shabby place without elephants and terns. And lonely, too.

But for many people nowadays, the most compelling reason to save wildlife is the practical one which tells them that to do otherwise would clearly not be in their own self-interest. Even in the age of extinctions — or perhaps especially in the age of extinctions — there is no getting away from the bottom line.

Consider, if you will, the lesson that is writ across the Gulf coasts of Florida and Louisiana, where there has been much enthusiasm in recent years for the development of marinas and condominiums. *Look at what's happened. When estuaries are buried under fill to accommodate these structures, the Gulf shrimp loses its nursery, the shrimper loses his job, the wholesaler looks for another product, and the retailer goes broke. And as the temperature rises in the global greenhouse, melting the icecaps and lifting the level of the oceans, by and by the seashore loses his condominium. In nature, there is no such thing as a free lunch.* The Ancient Mariner of Ecology, John Muir himself, said it long ago: "When we try

economic incentive for preserving rain forests and endangered species." To be sure, chemical prospecting is not the only economic incentive for respecting the integrity of rain forests and other wild habitats. One doesn't need a PhD. in ecology to realize that as the demands of industrial society continue to erode the world's capacity to absorb societal wastes — and its ability to produce a sustainable supply of resources — the price of doing business can only go up. When a square mile of irreplaceable rain forest goes down the tube, the cost of its lost values — as a carbon sink or as an oxygenator — sooner or later is going to show up in red ink on somebody's bottom line.

ON THE FRONT LINE

The New York Zoological Society, be sure, is not alone on the front line of the fight to save wildlife. In North America, there are scores of private, nonprofit organizations struggling to achieve similar goals. The World Wildlife Fund. Defenders of Wildlife. The National Wildlife Federation. The Wilderness Society. The Audubon societies. The Sierra Club. The Natural Resources Defense Council. The Environmental Defense Fund. There are regional, state, and local grassroots organizations. There are efforts focused specifically on landsaving and the acquisition of prime habitat, such as

is custodian of some 700 million acres, including the national forest system, the national wildlife refuge system, and the national parks system.

On the regulatory front, virtually all of the states now have effective fish and game laws on their books — though they are not considered effective by those who oppose the so-called “blood sports.” Some states have enacted their own endangered species programs to supplement, or go beyond, the federal one; or have started to put some money into habitat enhancement for non-game species.

The federal books, of course, are loaded with laws and regulations directly or indirectly affecting the



can Lion



Barasingha Deer

The Nature Conservancy's program to preserve biological diversity by purchasing and maintaining rare and endangered landscapes; such as the initiatives of Trout Unlimited to cure riverine habitat, and of Ducks Unlimited to snatch wetlands from the jaws of suburban sprawl and agricultural development.

State and federal government agencies are also on the front line, funding research, enforcing regulations, and managing — though not often to everyone's liking — huge trunks of public real estate that embrace much of the viable wildlife habitat remaining in these United States. The federal government alone

welfare of wildlife and the health of essential habitat — and here again, enforcement is rarely to anyone's liking, what with environmentalists demanding a tougher approach, and more of it, and the regulated landowner, farmer or business person pleading for less.

ENDANGERED SPECIES ACT

Of all the federal statutes, none generates such heated and polarized perceptions as the Endangered Species Act of 1972, which comes before Congress for reauthorization — or revamping — in September. To the committed wildlifer, the Act represents our last great hope for sustaining



Edward R. Roybal

Nearly a century ago, the New York Zoological Society was founded by a coalition of

leaders in business, science, government, and the arts. Its purpose was not only to establish a great zoological park in New York — the Bronx Zoo, opened in 1899 — but also to provide instruction for the public and to help preserve a priceless wildlife heritage that was already under severe attack.

Today, as wild animals and their habitats disappear at an increasingly alarming rate, we look to a new coalition of leaders and a new accommodation between people and their environment. We have less time to turn back the tide of destruction but more knowledge to do so. What we urgently need now is recognition that worldwide conservation serves the self-interest of every human being, of every national, regional, and corporate entity. And we need leadership to ensure the fulfillment of conservation goals that serve nature and human society.

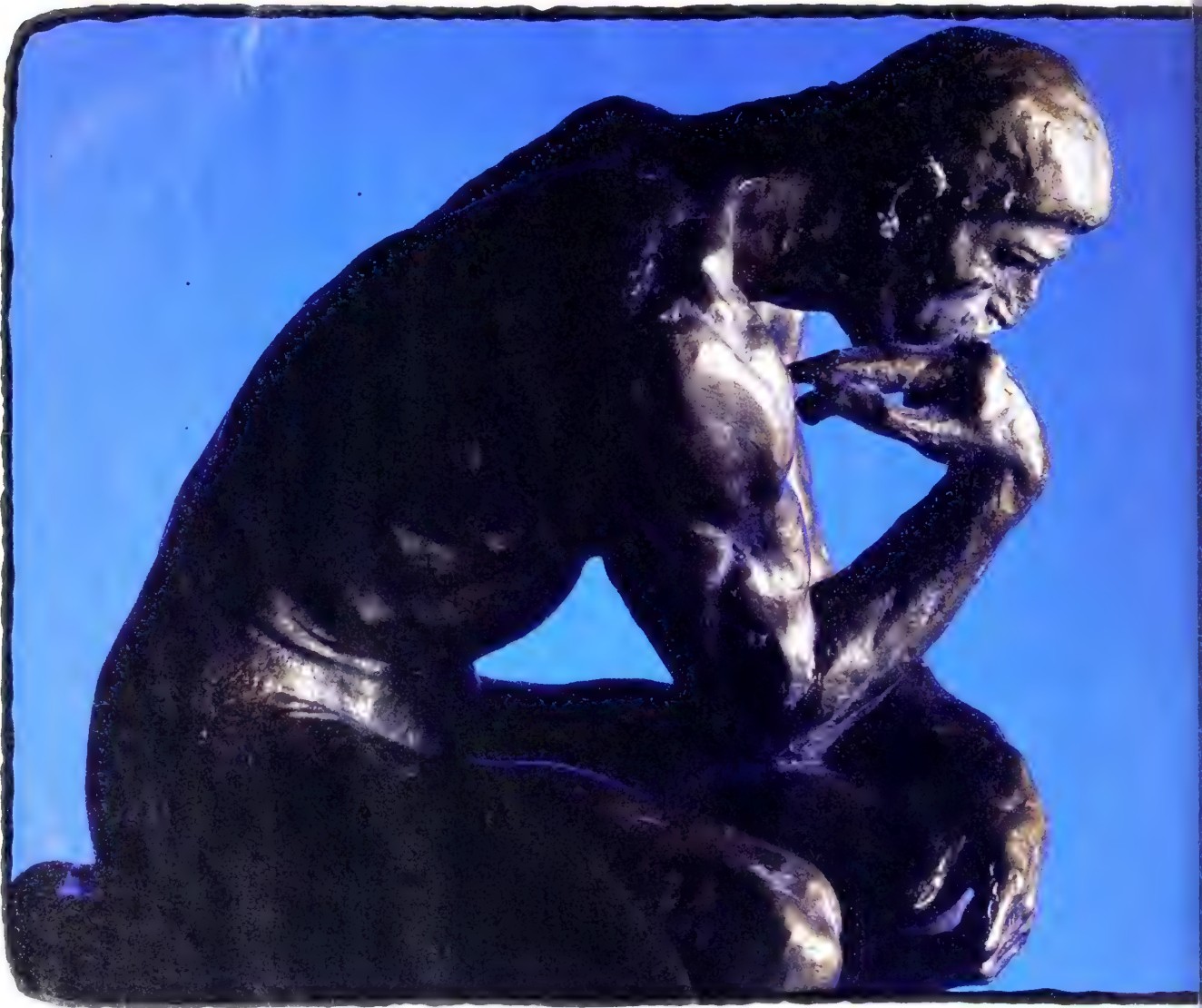
The New York Zoological Society provides a unique focus for the massive new effort that must take place. No other organization combines so many talents and conducts so many programs integrating science, education, and conservation action on behalf of wildlife and habitats around the world.

Field scientists, veterinarians, zoological curators, horticulturists, educators, artists, writers, and conservation professionals from the Bronx Zoo, New York Aquarium, Central Park Zoo, Wildlife Conservation International, and the Wildlife Survival Center collaborate on this great and necessary venture to save wildlife.

For more than half a century, the New York Zoological Society has done much to shape my own attitudes toward worldwide conservation, and I feel privileged to have been a part of this great organization's progress. To all who care about tomorrow, it remains one of our great hopes for the future.

Laurance S. Rockefeller
Laurance S. Rockefeller

INTRODUCING THE WORLD'S ONLY FAMILY OF BEARINGS THAT CAN DO THIS.



Who would have imagined that one day there would be bearings so advanced they could actually think?

One company did. The Timken Company.

And with our growing family of "smart" tapered roller bearings

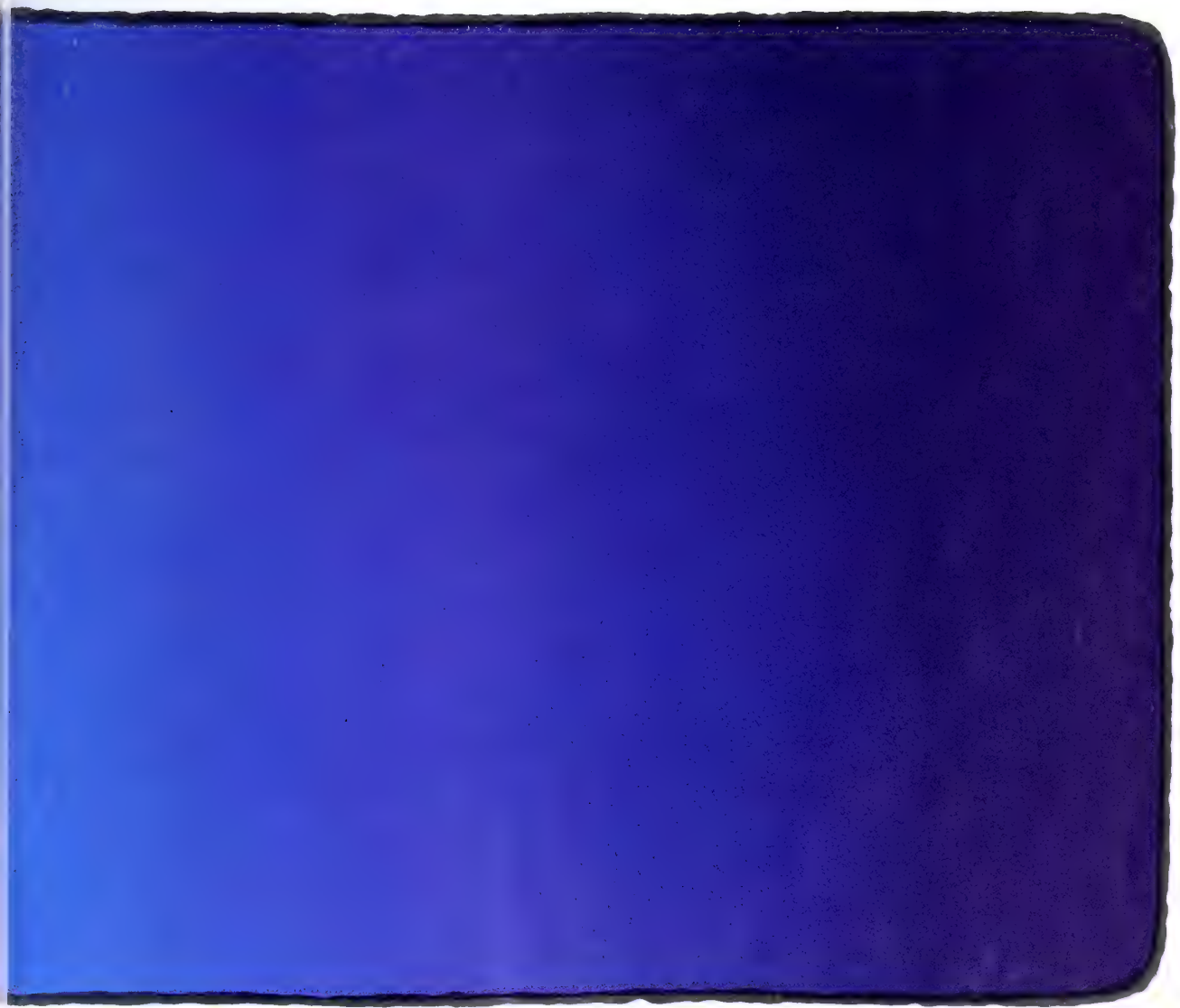
what was once unthinkable is now a manufactured reality.

These are the bearings—The Timken[®] Hydra-Rib Bearing, The Timken[®] Sensor-Pac Bearing and The Timken[®] Thermal Compensating Bearing that will change the way your company thinks

about bearings.

That's because these are the bearings that can actually sense changing operating conditions and then enable adjustments to be made.

What can "smart" bearings like these—and the ones that are yet to come—do for your company?



The same thing they are doing
for ours. Helping to assure that
we'll be out in front solving prob-
lems with the more advanced solu-
tions our customers expect from us.

And when you think about it,
that's doing the most important
thing of all.

TIMKEN

Doing what is best

USA • Argentina • Australia • Brazil • Canada • France • Germany • Great Britain • Hungary • India
Italy • Japan • Korea • Mexico • Singapore • South Africa • Spain • Sweden • Venezuela

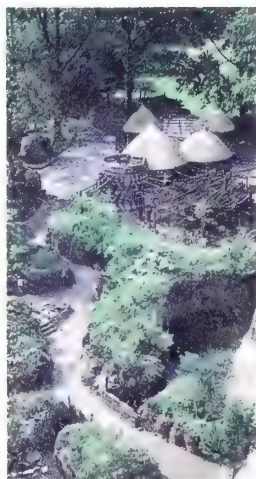
NEW YORK ZOOLOGICAL SOCIETY:

*An International Conservation Organization
here to sustain biological diversity,
to teach ecology, and to inspire care*



Helping society appreciate ecological connections — raising public awareness, if you will — is right up there with species survival and habitat protection among the NYZS's topmost priorities. Even before their brand-new Bronx Zoo opened its gates in 1899, the Society's founding fathers had determined they would make this institution a vehicle for education by exhibiting animals in settings as close to nature as possible. Today this zoo is a creative pace-setter in the replication of wildlife habitats. "The idea is to catch the visitor's attention," says John A. Gwynne, deputy director for design, exhibition, and graphic arts. "It's theater. You immerse the visitor in the animal's habitat, but the bottom line isn't entertainment. It's educating that person to the point where he has to care about the animal and to want to help save wildlife."

Baboon Reserve



George Schaller, director of science for WCI and author of such highly-acclaimed books as *Stones of Silence*, *The Year of the Gorilla*, and *The Giant Pandas of Wolong*. Over the years, Schaller has circled the globe in one major study after another. Most recently, Schaller worked with the Chinese government to establish a 100,000 square mile reserve in northwestern Tibet as sanctuary for the snow leopard, the Tibetan brown bear, and other rare creatures.



White Cheeked Gibbon

THE BRONX ZOO

- Wild Asia, a 38-acre habitat viewed (May through October) from an encircling monorail. Tigers, rhinoceroses, and elephants under the big Bronx sky.
- Himalayan Highlands, a mountainside and marsh habitat for snow leopards, red pandas, and white-naped cranes.
- The Baboon Reserve and African Market, featuring Ethiopian habitat for gelada baboons and other wildlife next to a replicated West African village.
- JungleWorld, a linear exhibit that immerses the visitor in spectacular reproductions of mangrove jungles and Asian rainforests populated with crocodiles, fruit bats, rock pythons, leopards, and gibbons otters, tapirs, and many other species.



Osborn Laboratories of Marine Sciences, affiliated with the Aquarium, is engaged in studies on the endangered coral reefs of the Caribbean and Indian oceans.

NEW YORK AQUARIUM

Founded independently before the turn of the century, the New York Aquarium joined the NYZS in 1902. Like the Bronx Zoo, it seeks to raise the visitor's awareness of conservation issues by exhibiting living specimens in simulated environments. Popular exhibits include the African Rift Lake; Discovery Cove, a complex devoted to coastal environments, and The Hudson River, which traces the river's life from its freshwater source in the Adirondack Mountains to the saline estuary of New York Harbor. And scheduled to open next spring is Sea Cliffs, a dramatic sequence of habitats that will bring to life the rocky world of seals, walrus, otters, and penguins.



Atlantic Harbor Seal

CITY ZOOS

In 1980, the Society signed the first of two agreements to renovate and ultimately assume operation of the facilities run by New York City's Department of Parks and Recreation: the Central Park Zoo in Manhattan, the Queens Zoo at Flushing Meadows Park, and the Prospect Park Zoo in Brooklyn. The first to reopen under NYZS management, in 1988, was the 6-acre Central Park Zoo with its intricate cross section of polar, temperate and tropical wildlife. For two years the Zoo's Wildlife Conservation Center alerted consumers to the impact of the trade on declining populations of endangered reptiles. That exhibit is to be succeeded by a critical examination of the illegal trade.

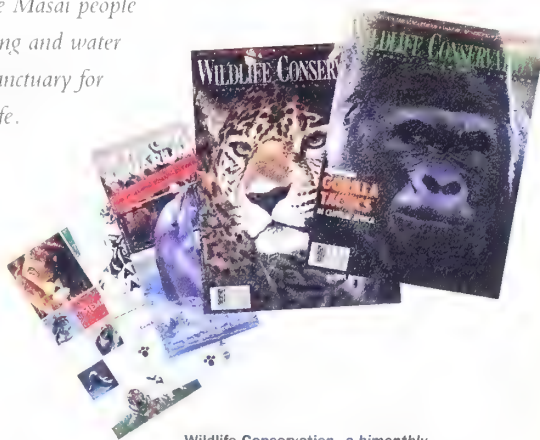


David Western serves as NYZS's senior conservationist and regional coordinator of African savannah projects. Western is noted for his efforts to balance the needs of wildlife with those of indigenous peoples. With the establishment of the Amboseli National Park project, Kenya, 1974, he helped the Masai people with their traditional grazing and water rights, while providing sanctuary for savannah wildlife.

EDUCATION

Getting ideas across beyond the NYZS's zoos and aquarium, as well as within them, is the responsibility of the Society's education chairperson, Annette R. Berkovits. According to Berkovits, there are to be no more wildlife lessons as "frosting on the curricular cake." Instead, she says, "Educators should accept nothing less in the curriculum than equal time for the all-important subject of species survival."

With Berkovits calling the tune, NYZS has developed programs in the life sciences, ecology, and conservation that are currently in use in the elementary and secondary school systems of 30 states. Among the more notable of these initiatives, if only because of their unforgettable acronyms, are W.I.Z.E. (Wildlife Inquiry through Zoo education), H.E.L.P. (Habitat Ecology Learning Program, a teacher-training project), and W.O.W. (Windows on Wildlife), a program concentrating on habitat and endangered species.



Wildlife Conservation, a bimonthly magazine published by the NYZS, is distributed to 80,000 members and contributors.



THIS YEAR
WE'LL SPEND MORE
ON R&D THAN MOST OF
THE *FORTUNE* 500 WILL
MAKE IN SALES.



We spend
more than \$2 billion
annually on R&D (over 10% of
sales) to bring the most profound technolo-
gies down to human terms. And put some of them
in human hands. ∞ The ultra-light cellular phone, a
direct result of our microelectronics research, is an exam-
ple. It was Fujitsu gallium arsenide circuitry that made smaller
and lighter cellular phones possible—like the Pocket
Commander™, measuring 5.3 inches in length, and
weighing under 10.4 ounces. ∞ Another Fujitsu
first—the High Electron Mobility Transistor—is mak-
ing improved broadcast satellite TV systems pos-
sible. And a design innovation incorporating voice guidance and
braille made Fujitsu automated teller machines first to accom-
modate the disabled. ∞ In over 100 countries, we're
translating the complexities of technology into new
ways to make life less complex. It's helped make us
the \$21 billion company we are today. Now
it's helping us make our name in
America.



High Electron Mobility
Transistor, a Fujitsu invention
made improved broadcast
satellite TV possible.

∞
FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS



biodiversity in America. To the Act's critics, it represents nothing less than a frontal assault on human life, individual liberty, and the pursuit of economic happiness.

Objections to the measure tend to run toward the general as well as the particular. The general objection, the way some folks in the logging, mining, construction, farming, and other industries tell it, is that the Endangered Species Act blocks progress, stops development, and destroys jobs. It is bad for business, they say. And it is especially bad, they argue, in its requirement that federal agencies consult with the U.S. Fish and Wildlife Service to make sure that their development projects, dams and highways and the like, don't jeopardize some little creature on the endangered species list.

Yet a study by the World Wildlife Fund analyzing the results of more than 70,000 federal agency consultations on development projects over a five-year period counted only 18 cancellations because of a conflict with the intent of the Act. A separate reading of statistics, by the National Wildlife Federation, shows 120,000 consultations resulting in only 34 cancellations. We're looking at a cancellation rate of less than half of 1% in either case.

And in the particular, of course, is the northern spotted owl. The owl has been driving people in the Northwest timber industry, not to mention some officials in the Bush administration, right up the wall. The owl is listed as a threatened species by the Fish and Wildlife Service, and the Service says it must have certain areas in the Northwest's old-growth forests set aside as critical habitat, untouchable by chainsaws

and skidders. Manuel Lujan, U.S. Interior Secretary and the Cabinet official responsible for enforcing the Endangered Species Act, wants an exemption in the case of the owl and its habitat because, he says, he doesn't "feel comfortable" with the loss of 31,000 jobs — and just in West-Central Oregon alone.

But few economists outside the Secretary's circle and the most hide-bound sectors of the industry believe that owl protection could possibly unhinge that many jobs in the entire Northwest, much less in West-cen-



Northern Spotted Owl

tral Oregon. So argues T. H. Watkins, editor of *Wilderness* magazine. "The most rational projection," he writes, "seems to be about 9,000 jobs [lost] throughout the region...by the end of the decade." And he notes: *This is a little over a third of the 26,000 already lost because of mill computerization, raw-log exports to Japan, and corporate flight to the South for cheaper wood and labor.... Not to mention all the thousands still to be lost for the same reasons whether owls are saved or not.*

Despite some ongoing skirmishes on the regulatory front, an increasing number of American corporations are dipping into profits to benefit wildlife survival directly (purchasing habitat, for example). And in many cases, the company's best people are spending their psychic capital on the good cause as well. One senses that a growing number of American businessmen and women are getting ready for the social and environmental changes they know are inevitable if the nation and the world are ever to achieve any kind of sustainable economy. One senses they are beginning to grasp the connections and the links, the dangers of dismantling the machine and throwing away any one of its parts.

The late William Beebe, possibly the New York Zoological Society's most indefatigable scientist in the earlier years of this century, once framed the issue with a different image. Beebe preferred art and music to machines:

*The beauty and genius
of a work of art
may be reconceived,
though its first material expression
be destroyed; a vanished harmony
may yet again inspire the
composer; but when the last
individual of a race of
living things breathes no more,
another heaven and
another earth must pass
before such a one can be again.*

Which brings us back to the original question: Can our environment survive without wildlife?

I suppose it could, for a while, anyway. But would anyone want to live here?



Bob Wilby

William S. Broadbent is senior vice president/investments with Lehman Brothers Division of Shearson Manhattan Brothers in New York. But he is

among a growing number of men and women who are proving that one can be a business person and a conservationist, too.

Like many supporters of land preservation efforts, Broadbent came to his avocation through a love affair with the great outdoors in general, and an enduring passion for flyfishing in Montana in particular. Today he is the proud co-owner of a ranch on the Yellowstone River, and serves as director-at-large of 'the Montana Land Alliance', a statewide conservation organi-

zation, and as a national trustee of Trout Unlimited, Broadbent writes of his concerns about wildlife and wild habitat in an article for "A Journal" published by The Center for Environmental Studies at Williams College (his alma mater). Here are a few excerpts from that piece to size the depth of his commitment.

What is generally described by the Greater Yellowstone Coalition as the Greater Yellowstone Ecosystem is an 18-million-acre web of life sustained by the forests, river, mountains, and valleys surrounding the world's first national park [and encompassing] some of the largest and most diverse wildlife populations in the lower 48 states. The endangered grizzly bear and bald eagle, the majestic trumpeter swan and the largest herd of free-roaming bison

in the country all depend on the Ecosystem for their survival....

"The Greater Yellowstone Ecosystem is, in my opinion the U.S. equivalent of South America's rain forests. If we permit our own temperate 'rain forest' to be destroyed by commercial interests, we have no business telling other governments how to manage theirs.... At minimum we should put a halt to federally subsidized timber sales that destroy the forest landscape at the expense of taxpayers. Recent surveys of the Yellowstone area demonstrate that the economic future of the region lies in the preservation of its natural amenities, not in the short-term gains of unsustainable industries that rely on the extraction of natural resources."

Design by Parham Santana, Inc. NYC

On The Subject Of Emissions, We'd Like To Clear The Air.



Many people are unclear about how electricity is made. In fact, much of it is made by burning fuels, such as oil and natural gas. But burning even clean fuels sends emissions into the air, some of which may harm the environment.

The more electricity we use, the more fuel that needs to be burned. And that means more emissions.

That's why Con Edison's Enlightened Energy program has using energy more efficiently as its goal. We're working hand in hand with you to achieve

it. Our financial incentives and information programs keep costs down and make efficient energy use as easy as it is sensible.

Enlightened Energy has programs for households and businesses in New York City and Westchester County. We'd welcome the chance to tell you more about them. Please call us at 1-800-343-4646 or write to Con Edison, Box 900, New York, N.Y. 10003. If everyone takes part, it could mean a breath of fresh air for us all.



Con
Edison

What does it take for a company to be both socially responsible and environmentally committed in today's world? The answer is a complex one, but it begins with caring.

We now know that there is a "finiteness" to our vital resources. The Love Canal and Three Mile Island were not just local disasters they had global implications. Airborne nuclear contaminants rain down around the world. Polluted rivers and aquifers spread their poisons far beyond the offending source. There are just too many of us doing too many destructive things to too small a planet.

The loss of wetlands, forests and other habitats means the loss of the wildlife that inhabits them. The destruction of South American rain forests means that fewer and fewer migratory birds come north each spring. The assaults the African elephant, the rhinoceros, the crocodile—even upon coral reefs—build up, one alongside another, to harm not only our idealized vision of the world but our world of

substance. we do not even know all the harm we are doing. We only know that our once-beautiful dreams now flow over us as nightmares.

All the material comforts on Earth can never substitute for clean air, drinkable water and diverse plant and animal life. With all our industrial and technological prowess, we can send people to the moon and back, but we cannot make a plant, a river, a bird—or even a real mouse.

My school on 78th Street in New York City had a Saturday club. Once a year we would put down the basketball or baseball, and go to the New York Zoological Society's Bronx Zoo and New York Aquarium, where hour after hour we were intrigued by the animals. Then I did not realize just how precious this wildlife heritage is, but the images of the creatures stayed with me, and now I appreciate more than their beauty—I appreciate their very existence. If given the chance, others, especially our young people, can learn to care as well.

Human beings no longer have a margin for error when it comes to decisions that encroach on the natural world. It is time for business to acknowledge this truth and assume a leadership role in protecting nature's heritage.

MICHAEL D. EISNER

*Chairman and Chief Executive Officer
The Walt Disney Company*



Incandescent parrots

Endangered

And half the medicine known to man

Time is running out



Every second another acre of rain forest is destroyed forever. World Wildlife Fund needs your help. Call 1-800-WILDLIFE.

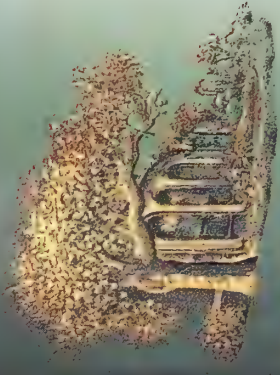
World Wildlife Fund  For Forest Preservation

It's time for a change to Gallo.



Shellfish bouillabasse with cilantro.

©E. & J. Gallo Winery, Modesto, CA



THE RESERVE CELLAR LOT

Ernest & Julio Gallo

RESERVE

Chardonnay

OF CALIFORNIA

A red umbrella with a dark wooden handle leans against a white desk. The desk is cluttered with office supplies, including a white multi-line office phone, a pen holder with various pens and pencils, and a small framed photo. In the background, a computer monitor and keyboard are visible. The umbrella's shaft is positioned diagonally across the frame, pointing towards the bottom right.

OPEN IN CASE YOU WANT
THE KIND OF SERVICE THAT MAKES
50% OF THE FORTUNE 500 OUR CUSTOMERS.

At The Travelers, service
has 33,000 names.

That's the number of
Travelers employees dedicated to
customer satisfaction.

And that's the real Travelers
difference.

One that can be measured in
everything we do for you... from 24-hour
toll-free hotlines to an investment of \$200
million to provide even better underwriting
skills and management of your claims.

It's a difference you will experience through
a network of local offices and a team of experts
assigned to your account — people whose
intimate knowledge of your business enables
a quicker, smarter response.

It's a difference backed by over \$50 billion
in assets and a 128 year tradition of service.

Service The Travelers Way.

TheTravelers 
You're better off under the Umbrella.®

LEIGH STEINBERG WANTS TO SAVE THE NFL FROM ITSELF

The agent has a pay formula that may appease owners and players

Leigh Steinberg hardly looks the part of one of the country's top sports agents. Spitting dark streaks of tobacco juice into a plastic cup, the 43-year-old Steinberg pads around his plush Newport Beach (Calif.) office in bare feet, baggy blue jeans, and an untucked button-down oxford shirt. But don't let the rumpled style fool you. On a recent Friday afternoon, with riots raging in Los Angeles, it took Steinberg all of five minutes to arrange for three of the National Football League's top stars—and, not coincidentally, his clients—to appear on local TV shows and appeal for calm.

That's just the sort of quick thinking that Steinberg relishes. For the past 17 years, Steinberg's ability to bag huge salary packages has lured the NFL's top draft choices, including this year's first-round picks Desmond Howard of the University of Michigan, David Klingler of the University of Houston, and Tommy Maddox of the University of California at Los Angeles. As part of the deals, Steinberg insists that players plow part of their money into good causes. "I believe you're put on this earth to make a difference," says Steinberg. "And athletes have such a unique opportunity as role models."

Now, Steinberg wants to make another sort of difference: He is out to save the National Football League from itself. With less than a month to go before the scheduled start of a trial that could result in unlimited free agency for NFL players, Steinberg has been crisscrossing the country meeting with owners and players to sell his peace plan. He fears that if it's not adopted, a ruinous civil war "will break out."

SALARY POOL. Steinberg's ideas, he insists, could make everyone in the NFL, including agents, a lot better off. First, he says, football should move to a system akin to basketball: Teams would agree to a formula in which a fixed percentage of gross revenues would be earmarked for player salaries. They would establish a league-wide minimum salary. With teams protected by set salary limits, the league could safely move toward a free-agency system. Money saved

from ending expensive lawsuits, combined with more aggressively negotiated TV deals, could eventually allow average salaries to more than double.

Sounds good, but skeptics in the league and elsewhere wonder where all those big TV bucks will come from. In recent months, top executives at the three big networks have warned that they have no intention of paying anywhere near the average \$910 million a

says Jerry Jones, general manager for the Dallas Cowboys—even though he remembers pulling an all-nighter with Steinberg as they hammered out details of quarterback Troy Aikman's \$11 million contract in 1989. "We're all in this together, and Steinberg is capable and committed."

SYMPATHETIC EAR. Players are likely to be even more receptive to the super-agent's pitch. After all, he has made many of them wealthy. And he listens to them. San Francisco 49ers backup quarterback Steve Young remembers the emotional day he broke off a longstanding engagement to his girlfriend. Steinberg rushed to his side and spent several days with Young. "He's always there when you need him," says Young.

Especially around contract time. Steinberg negotiated a record deal, worth \$42 million over 33 years, for Young in 1984. Now, with Steinberg pushing for a free-



STEINBERG, WITH DENVER'S MADDOX: ARE THE NETWORKS GOOD FOR MORE MONEY?

year the league gets under its current TV contracts, which expire after the 1993 season. Steinberg, though, thinks that is bull. "Competition for sports programming drives up rights fees," he wrote in a recent op-ed column. "Notwithstanding the doomsday scenario that the networks recently expressed about their future, they will be at the negotiating table bidding increased dollars for the next NFL television package."

To Steinberg, doomsday will come if the owners and players battle each other until they've wounded their common profit center, the NFL. And the owners are listening, if not always agreeing with him. "I welcome his involvement,"

agency system, more players stand to gain. Many with the most to gain will probably ask Steinberg to handle the negotiations, even if the agent nags them to give up some of their newfound wealth.

"I feel like Robin Hood," Steinberg says of using his players to promote charities. Other agents aren't so impressed. "There's nothing new to charity," sniffs longtime agent Bob Woolf. "Everyone's been doing it for years." But not every agent has the nerve to demand it from the guys who pay his bills. And not every agent is trying to cut a deal for an entire league.

By Eric Schine in Los Angeles

ONE TAKES THE HIGH-END ROAD, THE OTHER TAKES THE LOW

Two U.S. machine-tool makers have sharply different strategies for meeting the global challenge

Beset by weak demand and foreign competition that controls nearly half its home market, the U.S. machine-tool industry staggered through the past decade. The future of this industry, which makes the machines that make all the other machines, has been very much in doubt. Now, two of the largest producers are taking aggressive but different approaches to the business. The success or failure of Giddings & Lewis and Cincinnati Milacron will say much about whether U.S. companies can continue to compete in the global manufacturing arena.

GIDDINGS: BRING ON THE BELLS AND WHISTLES

When Giddings & Lewis Inc. and Cross & Trecker Corp. tied the knot last fall, "it wasn't a shotgun marriage," says Giddings Chairman William J. Fife Jr. That's putting it mildly. As the deal closed at 4 p.m. on Oct. 31, Fife and his crew whipped out four-inch-thick binders detailing how they would proceed. How thorough were these post-takeover plans? The binders covered each two-hour period through Christmas.

That thoroughness wasn't misplaced. By taking over Cross & Trecker for just \$127 million, largely in stock, the ebullient CEO nearly tripled the size of his company, turning it into the nation's largest and the world's No. 4 machine-tool maker. With estimated 1992 machine-tool sales of \$550 million, Giddings' tools are used to cut metal parts for everything from Caterpillar Inc. bulldozers to Pratt & Whitney Co. engines.

'SOLUTIONS.' Now, after hacking away 20% of the work force at near-insolvent Cross, Fife is putting his planning skills to work on the strategic changes that will determine if this merger will succeed: redesigning machines that were too costly to produce, coming up with common machine-control systems, and integrating Cross's European operation.

Giddings is battling a cast of international heavyweights, including Germany's Schiess AG and Japan's Okuma Ma-



CHAIRMAN FIFE: CUSTOMIZED TOOLS TO SERVE AN EXPANDED CUSTOMER BASE

chinery Works Ltd. The U.S. share of worldwide machine-tool production has tumbled to less than 7% from 19.3% a decade ago. As Fife sees it, the major U.S. machine-tool makers need to forsake narrow targeting to a few companies and become broad-line suppliers.

Cross should help. It adds small lathes and other machines, as well as huge auto-parts machining lines, to Giddings' core products—big tools that can be configured together to cut metal for large, complex parts in auto engines or booster rockets. Customized for each manufacturer, these tools can cost millions. Says Fife, 55: "We're here to sell solutions, not just machines." This focus contrasts starkly with that of rival Cincinnati Milacron Inc., which is looking for growth in a more low-end market. While Fife insists he will still build some cheaper machine tools, it's clear he sees

high-end tools as the path to growth.

It's hard to argue with Fife, whose company has been a rare success story among U.S. machine-tool makers. Under his direction since 1987, its earnings surged from just above breakeven to \$22 million last year. Shares in the Fond du Lac (Wis.) manufacturer have nearly tripled since it went public in 1989.

Granted, Giddings had some big advantages over its rivals. Key U.S. competition in the company's major products has all but disappeared. But Fife, who briefly ran a Cross division before joining Giddings, can take credit for bringing an intense focus on customers. One true believer is Chuck Gates, technical manager for power-train products at Caterpillar's Aurora (Ill.) plant. When one Giddings machine temporarily couldn't run at the rate Cat needed, Giddings gave him a check to cover a por-

ion of the overtime. Says Gates: "That's a first."

Fife has raised some eyebrows since absorbing Cross. He quickly eliminated Cross and the other long-established trademarks in favor of the Giddings & Lewis brand. More radically, he has centralized and revamped sales so distributors sell all Giddings and Cross product lines, from measuring machines to assembly equipment. Fife also wants to get more out of Cross's factories. Within weeks of the acquisition, Giddings moved work on big Boeing Co. and General Motors Corp. orders from its plants to Cross's vast West Allis (Wis.) factory, for instance.

U.S. GROWTH. Perhaps most crucial to Fife's expansion plans is Europe, a huge machine-tool market where Giddings had little presence. Cross has a plant in Germany, and the addition of Giddings' products to the Cross offerings could give it an important advantage. "Major clients, especially, like buying as much as possible from one source," says a top executive at one German competitor.

A solid first quarter, which brought a 3% increase in profits, to \$7.3 million, suggests that Fife is on the right track. Still, some critics are waiting for a fall. They claim that by instituting such radical changes in sales and manufacturing, G&L may lose out to aggressive niche players, particularly in Cross's important automotive market. "This is a business of long tradition," notes one rival. But then, the way things have been going in machine tools, maybe some traditions deserve a second look.

MILACRON: SIMPLER IS BETTER

Two years ago, when he set out to design a new line of machine tools for Cincinnati Milacron Inc., Cecil Breeden Jr. was determined to find out what his customers wanted. Twice, the veteran project manager led Milacron engineers into customers' plants to watch competitors' models in operation. They handed out 20-page surveys to workers, and they even videotaped the machines for good measure.

These were more than just fact-finding trips: They were survival missions. Badly bruised by its own miscues as well as tough competitive conditions, Milacron suffered losses in 5 of the past 10 years. In 1991, it had a \$100 million deficit, including special charges, on sales of \$54 million.

Now, after abandoning a 1980s diversification into such unfamiliar areas as bots, laser machines, and semiconductor materials, Milacron is pursuing an



ambitious strategy: Rather than focusing on specialized products for growth, the nation's No. 2 machine-tool maker is counting on simpler, lower-priced tools.

That means the Mill, as it has long been known, is battling for share in a market dominated by tenacious Asian companies such as Japan's Mori Seiki Co. and Yamazaki Mazak. A few U.S. manufacturers, including \$81 million-a-year Fadal Engineering Co., have succeeded in this \$8 billion worldwide market. But no domestic toolmaker has attempted to launch as broad a line as Milacron's. Despite its ambitious cost-cutting program, many question the company's low-end strategy. "If they're successful in getting 30% or 40% of the



ROSS AND MEYER: LOWER COSTS, QUICKER ROLLOUTS

cost out and keeping the quality in, what will the Japanese have done in the meantime?" says one competitor.

CEO Daniel J. Meyer, 55, naturally takes a more optimistic view. He figures Milacron can grab 20% of what will be a \$1 billion U.S. market for computerized standard machine tools, double its current share. These include computerized lathes, which make round parts, and machining centers, which perform a variety of metal-cutting tasks. Together, these metal-working workhorses are used by job shops to make parts for pumps to planes. Prices range from \$80,000 to as much as \$750,000.

Meyer and President Raymond E. Ross, 55, argue that this low-end business will grow faster and offset demand swings in the specialty markets. They believe increasingly sophisticated computers will expand standard machines' capabilities, and they will erode the market for more specialized machines.

Milacron's aggressive new-product program aims to take 40% or so out of the cost of its standard machines. Dubbed "Wolfpack," because it stresses teamwork, the program was spawned by a successful plastic-molding equipment project six years ago. Wolfpack calls for careful study of what customers want, more cooperation between functions such as purchasing and engineering, and greater attention to manufacturing needs during the design process.

Cecil Breeden's carefully researched new machining centers are promising examples. The Maxim 500, smallest in the line, is 37% cheaper to produce than the model it replaced. By standardizing in every possible way, the company reduced the number of parts by 60%. It takes less than half the time to build, can be installed in a fraction of the time, and requires only half the floor space.

To help sell the Maxim and other new products, the company has revamped its sales force. It dismissed many of its salespeople and signed up 30 independent distributors to cover the marketplace. In two years, it has thus increased its U.S. sales force from 87 to 267.

WAITING GAME. Most industry members and analysts see the Wolfpack producing good, competitively priced machines. Its success will depend on the U.S. machine-tool market. The industry has shown some signs of life, but it is still a long way from vibrant: Through March, orders were up 3% over first-quarter 1991, but were well below the levels of the late 1980s.

Lately, Milacron shares have traded at around 16, more than double last year's low. But they are still only half their pre-1987 high. Why do shareholders put up with it? The founding Geier family controls a quarter of the stock, and shareholders for three years or more get 10 times the voting power of newer owners. "You wouldn't find many companies able to bite the bullet on a three- to five-year program like this," Meyer says. Pretty soon, investors will find out if the wait was worth it.

By Zachary Schiller in Fond du Lac, Wis., and Cincinnati

Commentary/by Thane Peterson

CAN CORPORATE AMERICA GET OUT FROM UNDER ITS OVERHEAD?

Throughout the 1980s, Corporate America whacked away at labor costs. It tamed unions, exacted givebacks, and laid off millions of hourly workers. Yet, multitudes of U.S. companies still can't compete with their international rivals, and big operations such as General Motors Corp. and Du Pont Co. are going through new rounds of restructuring. Why is competitiveness still so elusive?

Maybe top executives and managers should look in the mirror. The dollar's fall, on top of cost-cutting, has helped lower U.S. unit labor costs by 42% vs. those of America's major trading partners since 1985. Now, experts say, the problem is overhead, chiefly plump white-collar bureaucracies. A 1990 survey conducted by Boston University found that overhead equaled 26% of sales for U.S. manufacturers, vs. 21% for Western Europe's and 18% for Japan's (chart).

FAIL-PRONE. "Excessive overheads," says Dexter F. Baker, head of Air Products & Chemicals Inc. and chairman of the National Association of Manufacturers, are "why you're now seeing so much cutting of white-collar work forces and delayering of management." Adds William J. Fife Jr., chairman of machine-tool giant Giddings & Lewis Inc.: "The labor content of a product today is probably less than 15%. So, I don't care how much I cut labor, it's not going to get to the bottom line. We have to get at overhead costs."

If past is prologue, most such efforts are likely to fail. GM, Du Pont, and others reorganized with great fanfare in the 1980s, but they're still fighting overhead. "It's like your front lawn," says Mark F. Blaxill, a vice-president at Boston Consulting Group Inc. "It just keeps growing back."

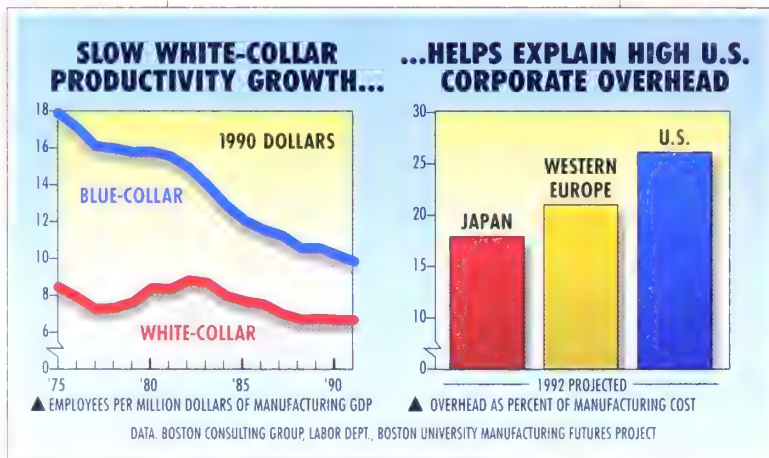
One reason is that most companies go about the job all wrong. After years of staff buildup, big white-collar layoffs may be an unavoidable first step. But simply axing paper pushers isn't enough. Just as important, many com-

panies have found, is to use so-called activity-based accounting to track costs. This technique assigns costs to each task performed by employees—even mail opening and phone answering by secretaries—making it easier to identify waste.

An even more important step may be stamping out unproductive work processes. Otherwise, staffers will just frantically work harder, trying to take on the tasks their departed colleagues once did. Stephen M. Moss, a consultant with Rath & Strong Inc. in Lexington, Mass., says managers in restructured companies sometimes put in 80-hour weeks and carry two beepers

The idea, says Kenneth J. Stancato, vice-president and controller at Weyerhaeuser Co., is to analyze work processes and eliminate as many "redundancies and non-value-added activities" as possible. General Electric Co. Chairman John F. Welch Jr. was adamant at GE's annual meeting on Apr. 22: "We need to cultivate a visceral hatred of bureaucracy."

WORKER INVOLVEMENT. GE is trying to become the model for that approach. Since 1989, Welch has focused heavily on improving white-collar efficiency. Under its Work-Out program, it holds corporate "town meetings" at which lower-level blue- and white-collar employees and even customers grill bosses and suggest ways to improve efficiency. The boss is supposed to approve or deny most suggestions immediately. The aim isn't to cut head counts but to get every employee involved in improving efficiency. Welch contends that Work-Out is the key to why GE's real productivity grew by 4% last year, more than twice the rate during the recession of



to keep up. Little wonder that staffing springs back once a recession is over.

What's the best way to boost white-collar productivity for good? Oddly, the process starts with giving more power to blue-collar workers, often through a quality program. Companies that organize workers into self-supervised teams and train them to do key tasks such as quality control can eliminate layers of supervisors and inspectors. Most Japanese manufacturers have mastered this approach, but few of their U.S. counterparts get it right—even after years of trying.

Many U.S. companies are also just starting on the crucial next step: an all-out war on bureaucracy. In the past few years, a cottage industry has developed among consultants who advise companies on how to attack the numbing accretion of report-making, bean-counting, and strategizing that builds up in the arteries of most corporations.

1981-82.

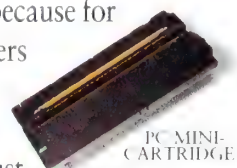
The problem is, companies don't usually go for such gains until they're under the gun. Troubled Chrysler Corp., for one, has cut its staff to the bone since 1989—making it "the model for white-collar efficiency" among Western carmakers, says analyst Maryann N. Keller at Furman Selz Inc. After a huge loss last year, GM hopes its latest reorganization will work as well.

For GM and others, the recovery will be the acid test. At Weyerhaeuser, overhead barely ticked down, to 9.65% of revenues in 1991 from 9.7% in 1989, because sagging lumber and paper prices depressed revenues. Now, the company is vowing to keep overhead flat as prices recover and revenues rise. It's a drama that will be played out at hundreds of companies. And its outcome may have a much greater bearing on U.S. competitiveness than flushing away blue-collar jobs.

DO A MILLION PEOPLE COUNT ON YOU?



Then you know what it's like to be a Canon personal copier. That's because for years, over a million customers have relied on Canon for crisp, clean copies.



They've also come to trust their personal copiers because they're virtually maintenance free, since everything that could run out or wear out, the toner, drum and developer unit, is in our exclusive single cartridge.

So if you're looking for the brand that's been #1 nine straight years and sold over a million, call 1-800-4321-HOP.

PC-1 PERSONAL COPIER



We'll tell you about our full line of personal copiers, from basic to feature-packed models. After all, a lot of people are counting on you, too.

Canon

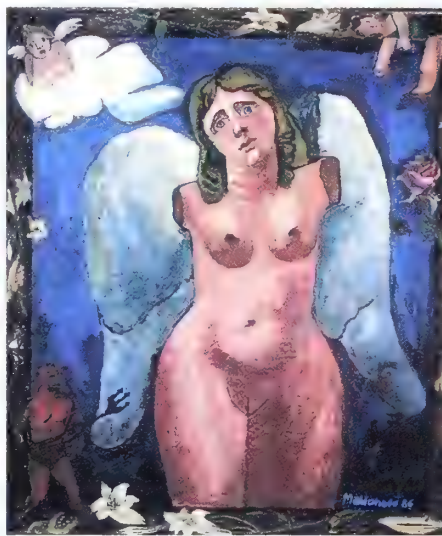


The Clean Earth Campaign



Enjoy easy extended payments with the Canon Credit Card. Ask for details at participating Canon dealers and retailers. Available only in U.S.

© 1992 Canon U.S.A., Inc. Home Office Products Division, One Canon Plaza, Lake Success, NY 11042



WORKS BY FERNANDO LEAL AND ROCIO MALDONADO: MANY COMPLAIN THAT ONLY ART LIKE MALDONADO'S—EASILY IDENTIFIABLE AS MEXICAN—IS BEING PROMOTED

MARKETS

THE NEW ART FROM MEXICO: IT'S THE COLOR OF MONEY

Its old masters are hot, and living artists' works are heating up

She's the high priestess of Mexican art, an icon gazing with penetrating black eyes from scores of self-portraits. Although dead since 1954, Frida Kahlo lives on as a cover girl for glitzy European magazines and New York auction catalogues. Her bohemian life, tumultuous marriage with Diego Rivera, and alleged fling with Leon Trotsky all give her star status. Her paintings, which sold for \$6,000 a decade ago, fetch as much as \$1.5 million now. And Fridamania is bound to spread if Madonna, who collects Kahlo, sticks with her plan to portray her idol in a movie.

Mexico's biggest international art phenomenon is hardly the country's only star these days. In the past two years, "Mexico: Splendors of Thirty Centuries" has drawn more than a million museumgoers in New York, San Antonio, and Los Angeles. This huge, dazzling display has boosted the appeal north of the Rio Grande of a broad range of Mexican artists. Add in the wealthy *arriviste* collectors created by Mexico's thriving economy, and it's no wonder that Mexican art prices are booming—even while European and American art prices have plunged. Several Mexican paintings have topped the \$1 million mark. Last fall,

Rivera's *Vendedora de Flores* sold at Christie's for nearly \$3 million, a record for a Latin American painting.

Whetted by the success of their dead masters, Mexican collectors are embarked on a risky new mission: trying to drive up the prices of the new generation of Mexican artists, thus boosting the value and prestige of their own collections. To this end, they're doing much of their shopping in New York and Los Angeles—even though that means paying an average of 30% more for Mexican works than they would at home.

HOT CACTUS. Leading the way is a slew of Monterrey-based industrialists who helped fund that northern city's new \$11 million contemporary art museum. Mexican galleries are pitching in, too: They've staged exhibits in New York featuring works by dozens of young artists, mainly "neo-Mexicanists" who paint in a Kahlo-inspired naïf style replete with

bleeding hearts, cactuses, and other popular Mexican images.

Right behind them is Televisa, the TV empire that has long been an important patron of Mexican artists and that runs Mexico City's most important private museum, El Centro Cultural de Arte Contemporaneo. Televisa is headed by Emilio Azcárraga, whose trove of works by Mexican masters, neo-Mexicanists, and international contemporary artists ranks him among the world's top 200 collectors, according to *ARTnews*.

These giants, along with hundreds of small collectors, believe that a little extravagance now will be rewarded later, once U.S. collectors follow their lead. "They want to inflate prices because they collect the art back home," says art dealer Sandra Azcárraga, the daughter of Televisa's chairman.

Adds Kurt Hollander, an art critic who also edits a new Mexican art magazine: "It's the most sophisticated manipulation of art that Mexico's ever had."

Carlos Salinas de Gortari's government is also playing a role. As Mexico negotiates a free-trade pact with the U.S. and Canada, Salinas wants to shift attention from Mexico as a source of illegal immigrants and drugs, accenting instead its rich culture, derived from North America's greatest ancient civilization. Mexico's President has traveled to the U.S. three times to cut the ribbon for the Thirty Centuries exhibit. He has also dispatched Mexican artists to the U.S. to gauge the response to the exhibit and related gallery shows.

WINNING WALLS. Promoting art is nothing new for Mexican officials. In the '30s and '40s, the government commissioned artists from the Muralist Movement, led by Rivera, José Clemente Orozco, and

David Siqueiros, to cover the walls of public buildings. Their massive, colorful paintings spread the Mexican Revolution's nationalist message. And they left a stunning aesthetic legacy that influenced such American artists as Jackson Pollock.

Now, reflecting Mexico's move toward privatization, the government is leaving most of the patronage to private interests. Among those taking up the cause is Monterrey museum board president Diego



AZCARRAGA SAYS PRICES ROSE TOO FAST



If you run database applications on a mainframe, we admire your patience.

Computers have spoiled us all.

When we first saw them finish tasks in minutes that used to take hours, we were impressed. When they did it in seconds, we were ecstatic.

But then your mainframe took on more tasks, more users, more data. And now, with all the other demands being placed on the host, your database users have to sit there and wait for their information.

Quite a few companies have solved that problem by offloading some of their mainframe applications to Sun™ SPARCserver™ systems.

Our new multiprocessing SPARCserver 600MP Series is the very model for fast database throughput, delivering some

of the industry's lowest costs per transaction.*

A Sun SPARCserver makes your users more productive too, giving them timely and transparent access to all systems on the network — including the mainframe. So your people keep working, not waiting.

And to keep them working, all major DBMS vendors offer their software products on Sun systems.

Look, computers impressed you once. A computer can impress you again. Call 1-800-426-5321, ext. 465, for our Database Performance Brief.

Go on, call. After all, your company has waited long enough.

 **Sun Microsystems**
Computer Corporation

*Among all the UNIX servers made today, the Sun SPARCserver 600MP recently scored the highest Transaction Processing Performance Council benchmarks for price and performance (TPC-A). Details will be included in the Database Performance Brief offered above. ©1992 Sun Microsystems, Inc. Sun, Sun Microsystems and the Sun logo are trademarks or registered trademarks of Sun Microsystems, Inc. All SPARC trademarks, including the SCD Compliant logo, are trademarks or registered trademarks of SPARC International, Inc. SPARCserver is licensed exclusively to Sun Microsystems, Inc. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. All other product or service names mentioned herein are trademarks of their respective owners.

Sada, whose interests include real estate and restaurants. Says Sada, who is spending big on neo-Mexicanists: "This is one of the best generations of artists that Mexico has ever produced." Experts also expect Banco Nacional de México (Banamex) and other newly reprivatized banks, which own major collections but had virtually stopped buying during a decade of state ownership, to become big buyers again soon.

Televisa is probably the biggest single promoter of art. It shelled out some \$4 million to help bankroll the Thirty Centuries exhibit. Besides owning the five-year-old El Centro Cultural, which specializes in Western art of the past 20 years, the TV giant boasts a collection that includes important pre-Hispanic as well as modern works. Televisa has contracted with several artists for the right of first refusal on their work. It pushes Mexican art via its three networks in ads, spots on news programs, and TV specials. It's also backing a new magazine, *Saber Ver* (Learn to See). And expect Televisa to promote art north of the border if it lands the 12% chunk of Univision Holdings Inc., the big U.S. Spanish-language network, that it's trying to buy from Hallmark Cards Inc.

CORN BEEF. Not everyone is pleased with these machinations, particularly the promotion of the neo-Mexicanists such as Rocio Maldonado, Germán Venegas, and Alejandro Arango. Artists and critics in Mexico City's bustling, young art community complain that the market-boosters promote only art that is easily identifiable as Mexican—at the expense of abstract and representational artists. "Artists in the U.S. don't have to produce the same old symbols...to be sold," says Fernando Leal, a prominent young Mexican painter whose style owes more to Cézanne than to Kahlo. Even gallery owner Patricia Ortiz Monasterio, who took neo-Mexican works to New York, says she's tiring of the well-worn symbols: "If I see another little ear of corn, I'll die."

Meanwhile, success abroad threatens to price the neo-Mexicanists out of their home market—even though Mexico's boisterous economy has produced thousands of yuppies eager to buy art. A Maldonado selling for \$6,000 in 1990, for example, fetches \$20,000 today. "Prices have risen too quickly," warns dealer Azcárraga. Instead of competing with big collectors for neo-Mexican works, young buyers are spending \$5,000 to \$10,000 for a Leal or a Teresa Velázquez. Their buying patterns—as well as the international status of many young Mexican artists—may now depend on whether American taste for Mexican art turns out to be lasting, or just fashion.

By Mary Farquharson, with Stephen Baker, in Mexico City

Entertainment

VIDEO

UP FROM SHADY LADIES—ALL THE WAY TO SNOW WHITE

Image's Disney deal may help it take the lead in videodisks

Even by Hollywood standards, it's an improbable tale. A decade ago, Image Entertainment Inc. got its start in videodisks with *Saddle Tramp Women*, a nude Western. But that was before Martin W. Greenwald met Mickey Mouse. Now, Image is Walt Disney Co.'s exclusive laser-disk distributor, and sales of *Fantasia*, the best-selling laser disk ever, have put Greenwald's company in the black for the first time.

Disney legitimized Image last December when its Buena Vista Home Video unit granted it sole rights to distribute laser disks for all Disney pictures for the next four years. Disney also got an option to buy up to 10% of the company. The endorsement set off a stampede. In March, Mitsubishi Corp. picked up 3.4% of Image for \$4 million. And on Apr. 28, Mitsui & Co. invested \$2 million. Says R. Mark Matheson, an analyst for Crittenden & Co., an Irvine (Calif.) investment banker: "I think Sony will be next."

Could be. Through last year, Image's only real competitor, Pioneer LDCA Inc., distributed the output of Sony Corp.'s Columbia Pictures Entertainment Inc. and Tri-Star Pictures Inc. film units, under a deal cut before Sony bought the studios. But analysts say that Sony, whose laser-disk players compete against Pioneer's, is reluctant to renew. And Sony's Terre Haute (Ind.) disk factory gets 90% of its business from Image. "Columbia is the plum," admits Greenwald, Image's chairman and CEO, who will say only that the two companies are "in negotiation." Exclusive rights to Sony disks would give Im-



FANTASIA: FAMILY FARE FOR AN EX-PORN DISTRIBUTOR

age a lock on over half of the \$300 million U.S. videodisk market.

It's a far cry from the company's roots. In 1981, Greenwald and a partner put up \$150,000 for 90% of an ailing porn-film distributor and pushed the company into laser disks. Hyped as the replacement for the VCR, laser-disk players instead carved out a tiny but growing niche among videophiles who prize their super-

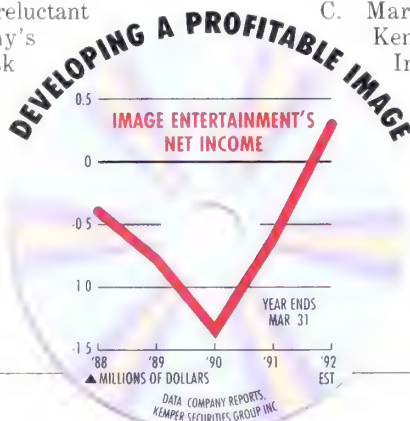
ior picture and sound. By the end of 1991, only 650,000 U.S. homes had a laser-disk player, while three-quarters of U.S. homes had VCRs. But in the first quarter of 1992, player sales were nearly 50% ahead of last year.

OSCAR POWER. In 1987, Image figured that the only way to exploit the niche was to represent studios on an exclusive basis. To raise cash to buy those rights, it sold a 38% stake to billionaire John W. Kluge, majority shareholder of Orion Pictures Corp. Kluge steered Orion's films to Image, bringing it back-to-back Oscar winners *Dances with Wolves* and *The Silence of the Lambs*.

The Disney films sent revenues up 20%, to at least \$58 million for the year ended Mar. 31, analysts estimate enough for a tiny profit. "These guys achieved profitability on a household penetration of half a percent," says Paul

C. Marsh, an analyst at Kemper Securities Group Inc. "Imagine what they could do with 2% or 3%." Those numbers could be reached by the mid-1990s. Until then, Greenwald has his studio partners to keep the dream machine going.

By Larry Armstrong in Los Angeles



AMBAC is one of America's leading municipal bond insurers. Proof of that leadership? Since founding the industry in 1971, AMBAC has, for example, insured more health care-related issues than any other municipal bond insurer. That translates directly into

OUR COMMITMENT TO AMERICA CAN BE A LIFESAVER.

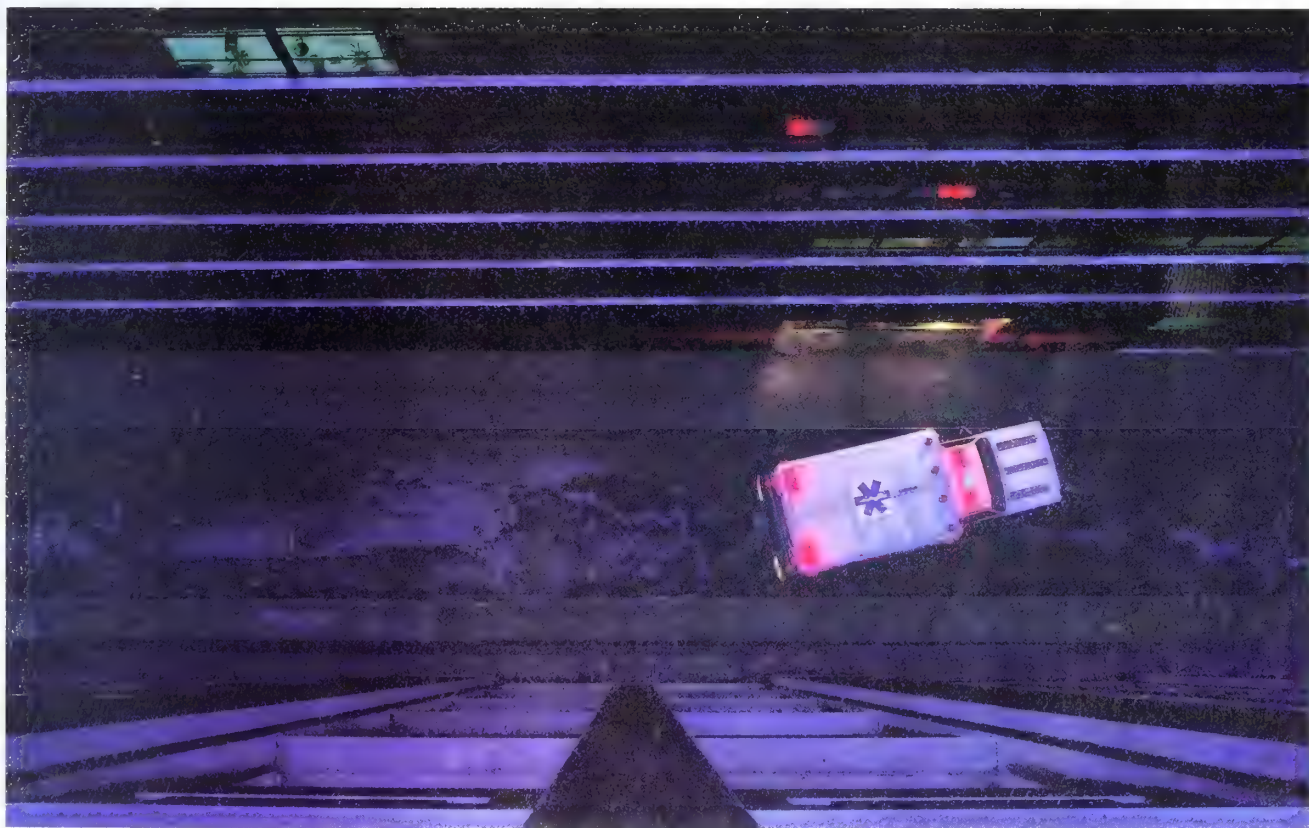
new hospitals, state-of-the-art equipment and emergency vehicles that are helping to save lives all

across America.

Our work in health care is further evidence of AMBAC's commitment to strengthen America, and help secure its future by rebuilding its aging infrastructure.

Our commitment extends also to the *municipal bond market*, through our recognized analysis and research capabilities, which means fast turnaround as well as competitive pricing for both issuers and advisers.

AMBAC believes that what's good for America is good for those who invest in it. That's a philosophy that can save not only money but lives as well.



AMBAC

AMBAC Indemnity Corporation
One State Street Plaza, New York, NY 10004
(212)668-0340

IS THE NIH'S DOCTOR IN? YOU'D BETTER BELIEVE IT

Agency chief Bernadine Healy plays hard—and wins her share

Washington isn't a town for the impatient: It rewards timidity and coalition-building more than boldness. So the place hasn't quite figured out what to make of Dr. Bernadine P. Healy, director of the National Institutes of Health—and vice versa. "I do not believe," she says, "in kneeling at the altar of consensus."

No, she doesn't. In her first 12 months

And that's just the half of it. Supporting a new NIH practice of seeking patents on pieces of genes, Healy touched off a bitter battle with Nobel laureate James D. Watson that ended in April with the geneticist resigning as head of the NIH's genome center. She was in favor of doing a survey of teen sex behavior and of research using fetal tissue, and was overruled in both cases. She

HEALY: IN CONTROL,
BUT UNDER FIRE



on the job, a period many fledgling chieftains spend redoing offices and surveying the landscape, the 47-year-old cardiologist has plunged boldly—some say recklessly—into one controversy after another. She eased out two top NIH officials, angering bureaucrats below. She revamped the NIH's handling of several highly charged cases of scientific misconduct, setting off a dispute with House Energy & Commerce Committee Chairman John D. Dingell (D-Mich.).

also has stirred up the NIH's parent—the Health & Human Services Dept. (HHS)—plus the science community, with a grandiose strategic plan for all biomedical research. The breakneck pace, plus Healy's style, has led disgruntled agency officials to call her "She Who Must Be Obeyed." Still, few disagree that the NIH—facing budget strains after two years without a permanent head—desperately needs a strong boss. "Dr. Healy has pluses and minuses," says one top

HHS official, "but her pluses far outweigh her minuses."

Healy's task is to halt a creeping decline. A decade or so ago, says Katherine L. Bick, former director of extramural research, the NIH "was almost a magical place." Researchers had the freedom and funds to pursue everything from polio vaccines to the genetic causes of cancer. This island of discovery was largely protected from the vagaries of government and politics.

NIH is still a respected agency, doing \$1 billion a year of its own research and supporting more than 50,000 U.S. scientists. But the \$9 billion enterprise is showing strains. NIH officials complain of overcrowded labs, a brain drain, and political intrusions into their world.

'SICK PATIENT.' Healy's predecessor, James B. Wyngaarden, was forced out in 1989, partly for not opposing abortion. Probes of misconduct in prominent labs have cast doubt on the integrity of science. And reflecting rapid expansion in biomedical research and a stagnant budget, scientists complain that too many good ideas—and promising young researchers—are withering for lack of funds. "NIH was a sick patient when I

HEALY'S REGIME

A TOUGH FIRST YEAR...

APRIL, 1991 Bernadine Healy takes over as director of the National Institutes of Health

AUGUST, 1991 John Dingell questions Healy's handling of alleged scientific misconduct at NIH and elsewhere

JAN.-FEB., 1992 Healy's strategic plan draws protests from the HHS and scientists

APRIL James Watson, director of the NIH's Genome Center, resigns after public disputes with Healy

...AN AMBITIOUS AGENDA

MANAGEMENT Instill a corporate mentality in the NIH's 20 institutes, divisions, and centers

IMAGE Burnish the image of the NIH and biomedical science by beefing up public relations

FUNDING Engineer a boost in the agency's nearly \$9 billion budget by convincing Congress of the NIH's vital contribution to the nation's health and economy. Examples include research into biotechnology and vaccines

came here," says Healy. She adds, only half in jest: "Things were so bad they couldn't find a man to take the job."

Healy certainly had the qualifications. After growing up over her father's perfume factory in Queens, N.Y., she excelled at Vassar, at Harvard medical school, as a researcher and administrator at Johns Hopkins, and as research director at the Cleveland Clinic. Her Washington experience includes a stint at the White House Office of Science & Technology Policy in the mid-1980s. Even during her early career at Hopkins, recalls David A. Blake, now senior

The HP 95LX palmtop PC.

What is this activity regarding? F2--
 Company: Brakke & Associates
 Contact: Jack Harris
 Phone: 260-233-1639 x0 3879 CC1
 Title: Marketing Manager
 Address: 15th and Dambacher
 City: Spring Hill, ST 50 ZIP: 57274
 Meeting: 06/17/92 8:05a Followup
 Memo: 1 of 1 05/23/92 13302

Time Value of Money - case 1
 Number of periods... N = 360.00
 Annual interest... I/YR = 10.00
 Present value... PV = 150,000.00
 Future value... FV = 350,000.00
 Payments per year... P/YR = 12
 Begin/End mode... B/E = END
 Result: -1,577.96
 Memo: 1 of 1 05/23/92 13302

Source Target File Quit
 was receptive to the new HP 95LX, as well as the communications hardware that works with the unit. Mr. Botero was interested in the features of electronic mail.
 era receptivo al HP nuevo 95LX, así como también el equipo de comunicaciones que trabaja con la unidad. Sr. Botero se interesó en los aspectos de correo electrónico.

Appointment Book 05/21/92 1:23 pm
 Tuesday June 2nd, 1992
 8:00a 9:00a 10:00a 11:00a 12:00p 1:00p 2:00p 3:00p 4:00p 5:00p 6:00p 7:00p 8:00p 9:00p
 Lunch with Hans Martin
 Call Barbara with update
 Help Copy Paste Note Insert Find

Don't forget to pack your office.

Just because you're out of the office doesn't mean you have to be away from your critical business information. Now you can transfer your files and take them with you. With the HP 95LX. An MS-DOS® based computer that measures just 6.3" x 3.4" x 1" (closed).

The HP 95LX is packed with built-in software. Lotus® 1-2-3® lets you take your spreadsheets with you. Do "what ifs." And attend meetings with all the latest figures. Phone Book allows you to instantly access names, phone numbers and ad-

resses. Appointment Book lets you monitor your schedule. There's even Memo Editor. And, of course, a powerful HP financial calculator. Dozens of optional applications are also available. For example, SkyStream receives messages wirelessly. Money Manager tracks monthly expenses. ACT! manages client data. Globalink translates languages. And IntelliLink interacts with Microsoft® Windows. The HP 95LX applications reside in the 1-Mbyte ROM. There's up to 1-Mbyte RAM for *your* files. And

with the plug-in slot, plenty of software and memory can be added.

Call 800-443-1254, Dept. 29 for details and U.S. retailer locations. In Canada, call 800-387-3867. After all, you're going places.



Microsoft and MS-DOS are U.S. registered trademarks of Microsoft Corporation. Lotus and 1-2-3 are U.S. registered trademarks of Lotus Development Corporation. ACT! is a product of Contact Software International Inc. SkyStream receiver is a product of SkyTel. Money Manager is a product of Autabyte Corporation. Globalink is a product of Globalink Inc. IntelliLink is a product of IntelliLink Inc. © 1992 Hewlett-Packard Company PG12200A

COLIBRI LE GRAND.
AFFORDABLE LUXURY
FROM \$29.95



Colibri
LE GRAND

Lifetime Mechanical Warranty

Available at

KIM'S LUGGAGE

or call 1-800-556-7354

Science & Technology

associate dean at its medical school, "you knew she was going to be the first woman dean of a major medical school or head of NIH."

Her vision for the NIH is unabashedly expansionist. "The single most gaping failure of NIH today is that it has not become a truly visible public and policy priority," declares Healy. Her plan is to convince Congress and the public that the NIH is so vital to the health and economic competitiveness of the nation that it deserves huge budget increases.

Over the winter, Healy and her staff wrote an 800-page strategic plan listing scores of areas, from genetics to embryology, that need more research. Funding them all would have meant nearly doubling the NIH budget. The tome was to be released at a February meeting of scientists and NIH leaders. But at its HHS review, officials were amazed at Healy's audacity. "Both the President and the Secretary would be embarrassed by the plan's unveiling," wrote Martin H. Gerry, Assistant HHS Secretary for planning and evaluation, in a Jan. 10 memo. "The only 'strategy' ... seems to be acquisition of additional funds." To Gerry, such budget-busting was political folly. After heated meetings, HHS Secretary Dr. Louis W. Sullivan let Healy release a 14-page framework along with background papers.

GENE WARFARE. With typical confidence, Healy says she won the day. "Gerry had a position that I totally disagreed with," she says. "And when we argued it through, my view was the most compelling." But victory came with another political constraint: "We cannot come out and admit what we really think about concrete budget figures," she concedes.

The plan also provoked scientists. Researchers were miffed that they hadn't been consulted, that pet areas of science were ignored, or that the NIH might focus on boosting economic competitiveness rather than basic research. In meetings since, Healy has won most of them over with assurances that their concerns will be addressed. In fact, the strategic plan is now on the fast track.

Still, the episode fed already strong criticism of Healy's style. "HHS has a lot of problems with Dr. Healy and her fervor for her own initiatives," gripes one top staffer. And the tiff with Watson—a discoverer of the structure of DNA—un-

derscores her reputation for punishing disloyalty. Watson publicly criticized her support for the NIH's policy of filing patents on fragments of genes, a process he thinks will stifle scientific cooperation. Healy subsequently questioned whether Watson, a part-time NIH employee, had a conflict of interest because of his biotech holdings. Watson says this convinced him that she wanted him out. "She can be inflamed very easily," says one NIH staffer. "Watson did that, and he's gone."

BEFORE HER
ARRIVAL, QUIPS
HEALY, 'THINGS
WERE SO BAD
THEY COULDN'T
FIND A MAN TO
TAKE THE JOB'



Supporters call Healy's reputation for combativeness simply the price for bold action. "She has ruffled some feathers," says Joel M. Schindler, a former NIH official. "But NIH needed some ruffling—and I think she hasn't ruffled enough." Others wonder if the criticism masks resentment of a woman at the top of a once male bastion. "I think she's gotten a bum rap," says one Hill aide. "She doesn't kowtow the way she's supposed to."

Still, Healy isn't ignoring her patrons. She put a new \$176 million NIH building, named after House Appropriations Committee Chairman William H. Natcher (D-Ky.), on the fast track. And she recently spent two weeks at tedious congressional hearings on each of the NIH's 20 centers and institutes. So far, there haven't been any repercussions from Healy's August sparring with Dingell. He had hauled her before his oversight subcommittee to question why she had reorganized the NIH's science misconduct office during probes of Nobel laureate David Baltimore and AIDS researcher Robert C. Gallo. Dingell, who worried that Healy might whitewash misconduct, now declines to comment on her performance.

For Healy, the rough road has been an education. "When you make decisions, you get more than criticized," she says. "You become cannon fodder." But that hasn't shaken her resolve to "make this place better." Already, her push for research on women's health and interest in disease prevention is helping NIH respond more quickly to the needs of the nation. Barring more missteps, this unconventional bureaucrat may be what the doctor ordered. "She has a style that some people aren't used to," says Dr. Anthony S. Fauci, head of the NIH's AIDS effort. "But she is, and will be, a very positive force for NIH—and science."

By John Carey in Washington

BUDGET AND AMERICAN EXPRESS COMBINE FORCES TO CUT TRAVEL COSTS.

Everybody has to cut travel costs these days. Some companies just help you do it better than others.

Every time you use the American Express® Card at Budget, you can choose from three exclusive offers like a low rate on a luxurious Lincoln. Or 10% off your next rental. Or a double upgrade. Make your next trip smarter than ever by joining forces with Budget and American Express.

To receive these offers, here are a few details you will want to know. These offers are good between 4/1/92 and 6/30/92 at participating Budget locations, when you charge your rental with the American Express Card. You will need to mention offer at time of reservation and at time of

THREE SMART CHOICES.

\$39⁹⁹
Per Day.

Lincoln.
Unlimited Mileage.
*Optional LDW \$12.99
or less where available.*

10% OFF

*On compact through
full-size cars.
2 or more rental days.*

**DOUBLE
UPGRADE.**

*When you reserve an
intermediate-size car,
receive a double upgrade
to a full-size.*

rental. Three-day advance reservations are required. Double upgrade subject to availability of larger car at time of rental. Refueling service, taxes and optional items are extra. Offers not available with any other discount or promotion. 10% off not available with CorpRate® or government rates. Blackout periods, surcharges for extra drivers and drivers under 25, and other normal rental requirements will apply. Car must be returned to renting location. Lincoln rate may be higher in New York and other major metropolitan areas. Only one offer per rental. For information and reservations, contact your travel consultant or call Budget at 800-527-0700 and ask for the American Express promotional offers.



THE SMART MONEY IS ON BUDGET.™

We feature Lincoln Mercuro and other fine cars.

DEWAR'S PROFILE

Bob and Mindy Rich

HOME:

Buffalo, N.Y. "Let it snow, let it snow,
let it snow. We love it here."

AGES: 50 & 33

PROFESSIONS:

Owners, Buffalo Bisons Baseball, Inc.

HOBBY:

Shooting pool. "The folks at Julian's Billiard Academy aren't exactly quaking in their boots."

LAST BOOK READ:

Once More Around the Park: A Baseball Reader, Roger Angell.

LATEST ACCOMPLISHMENT:

The best attendance record in AAA baseball. Goes to show you what two people can do when they're of one mind.

WHY WE DO WHAT WE DO:

"It's our favorite pastime."

PROFILE:

Completely attached to each other and their work. Though they don't always see eye-to-eye, no umpire is needed to settle disputes.

QUOTE:

"It ain't over even when it's over."

THEIR SCOTCH:

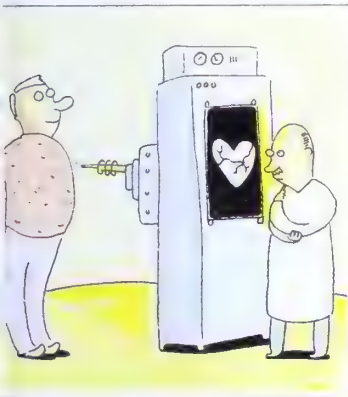
Dewar's "White Label." On the rocks, with soda. "It's the perfect night game nightcap, but always in moderation."



Developments to Watch

EDITED BY FLEUR TEMPLETON

MAKING SURE X-RAYS HIT THEIR TARGET



X-rays have been in use for nearly a century, but the technology has shortcomings. Unlike ordinary light, the beams can't be easily focused or directed with lenses and mirrors. So physicians often need to use higher dosages to get a clear picture. X-ray Optical Systems Inc., a tiny company based in Albany, N.Y., is developing an innovative tech-

nology that provides better X-ray control. Invented by Russian physicist Muradin Kumakhov, this approach channels X-ray beams through thousands of tiny, hollow glass capillaries arranged in a strong but flexible honeycomb-like bundle. As a result, the beam can be precisely directed to a small spot. The system will give higher resolution with less radiation, says David Gibson, president of XOS. Initially, Gibson says the technology will be used for soft-tissue imaging such as mammography and angiography, where better resolution is needed. Future applications may include irradiation of tumors, industrial inspection, and X-rayography for making high-density integrated circuits.

THE RIGHT LUBE JOB FOR SUPERHOT CERAMIC ENGINES?

Someday, ceramic engines may replace today's less efficient metal ones. That's because they weigh less—and burn fuel more completely. One problem, though, is finding a lubricant that will withstand the 600C temperatures in a ceramic engine. So far, researchers have relied on phosphoric acid esters. But these fire-resistant lubricants form a highly corrosive acid. Now, a Rensselaer Polytechnic Institute researcher has come up with a technique that uses a carbon-based gas as a lubricant. Mechanical engineer James L. Lauer sends a pressurized stream of carbon-rich ethylene gas to coat the bearing with a graphite-like slick. Ultimately, he hopes to use unburned hydrocarbons from the car's exhaust as a friction-reducer instead of ethylene. Still, an ultra-efficient ceramic engine may be some years away. A ceramic engine bearing lubricated with the gas lasted longer than an unprotected part. But while Lauer expects to improve the wear-resistance of his gas, today it offers only a sliver of the protection of low-temperature oils.

SMARTER RADAR MAY MAKE FLYING FASTER

As any frequent flyer knows, bad weather can make for interminable airport delays. One reason is that the Federal Aviation Administration requires airports with parallel runways less than 4,300 feet apart to stagger incoming flights on one of the runways during foul weather. Now, a new type of radar system called Precision Runway Monitors (PRM) could lessen the delays.

The FAA recently awarded a \$33.7 million contract to Allied-Signal Inc. for a PRM system that updates air traffic controllers on the position of approaching planes twice each second vs. once every five seconds for conventional radar. The close monitoring will enable airports to operate parallel runways even in bad weather.

The system projects the plane's path and issues warnings if it begins to stray toward the safety zone between runways. On the controller's screen, the plane's symbol changes from green to yellow if the aircraft is within 10 seconds of crossing the line. It flashes to red and an alarm sounds if the plane actually enters the zone—giving the controller enough time to order evasive action. The new PRMs will be installed in the Atlanta, Minneapolis-St. Paul, Memphis, Raleigh-Durham, and Baltimore-Washington International airports beginning in 1994.

THEY'RE NOT KIDDING WHEN THEY SAY 'BLUE MONDAY'

Talk about Monday-morning blahs. In a study, researchers at Boston University have found that strokes are twice as likely to occur between 6 a.m. and noon than at other times of the day. And hemorrhagic strokes—caused by a broken blood vessel in the brain—strike most often on Mondays.

The data come from the latest update to the 42-year-old Framingham Study. Since 1950, BU and the National Institutes of Health have been monitoring the health of 5,070 residents of Framingham, Mass., who were free of cardiovascular disease when the study began. Subsequently, 633 suffered strokes. Of the 382 cases in which the time of the strokes could be determined, more than half occurred on Mondays.

Margaret Kelly-Hayes, a registered nurse and member of the Framingham Study team, says that knowing when people are most prone to strokes could help neurologists better understand the risk factors and behaviors that precede and contribute to the often fatal attacks.

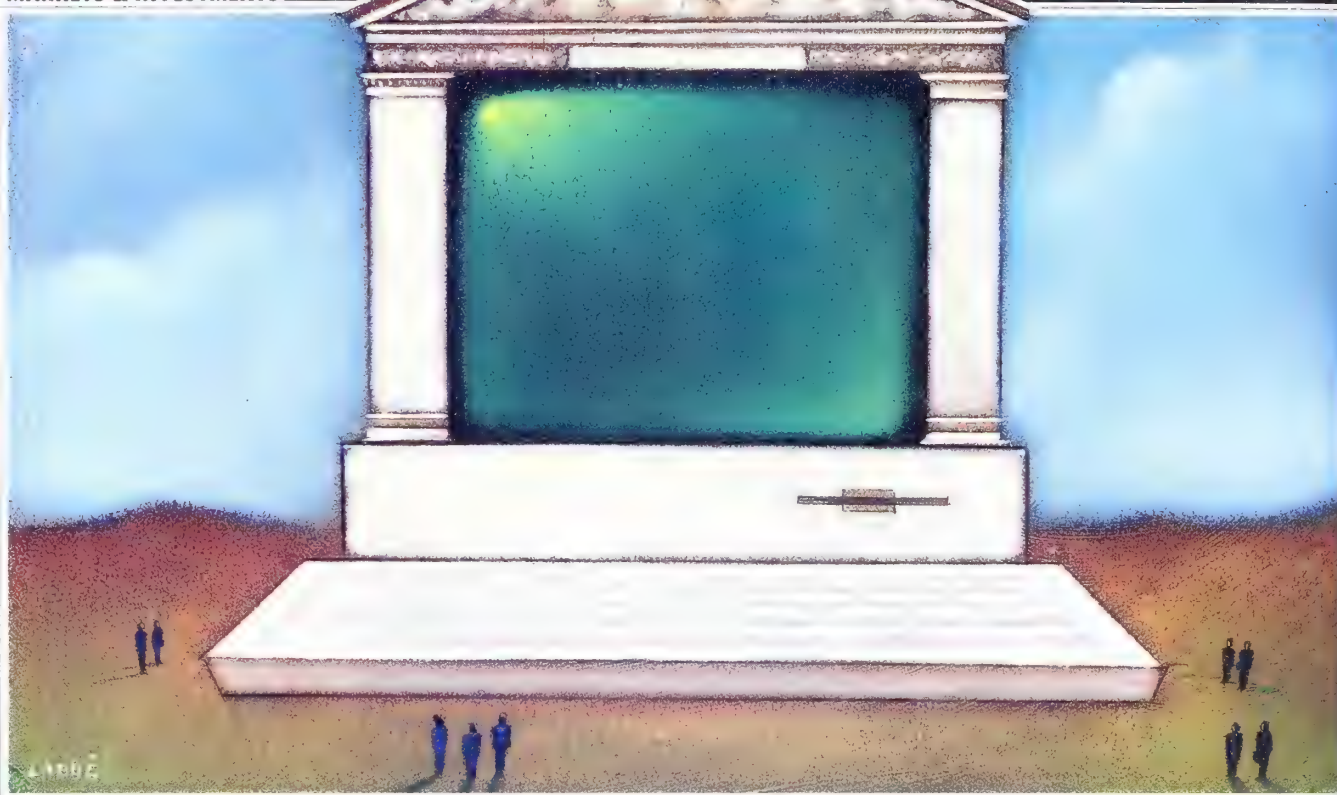
BETTER PUT SOME POWDER ON THAT SPRAIN

Athletes may soon make room in their freezers for a cold compress that molds to the body and works up to three times as long as ice and gel packs.

The Med-paq compress contains a special silica-water-based material that remains in powder form even during melting and freezing. Polythermal Inc., in Scottsdale, Ariz., is marketing Med-paq, which was developed by chemist Ival Salyer, of the University of Dayton's Research Institute in Ohio.

The cold compress is one spin-off from a decade-long research project to find new materials that gradually absorb and release heat. The work has also resulted in a substance that may be used to help insulate a test house this fall. Salyer expects other spin-offs: These so-called phase-change materials might provide thermal protection for aircraft flight recorders—and someday even help growers prevent damage to citrus trees during severe cold snaps.





PROGRAM TRADERS: THEY'RE BACK, WITHOUT THE BAD VIBES

The new breed uses index arbitrage as a hedging tool in custom options and swaps

When program trading came into vogue in the mid-1980s, it was at the forefront of Wall Street's computer revolution—and its practitioners included the Street's largest and most luminous brokerages. Merrill Lynch, Morgan Stanley, Dean Witter, Bear Stearns, and Salomon Brothers all profited mightily from the most controversial form of program trading, index arbitrage. By exploiting momentary price differences between index futures and underlying stocks, these firms designed a nearly riskless money machine. The only drawback, it seemed, was persistent criticism that such rapid-fire trading made the market too volatile.

Today, index arbitrage has all the awe-inspiring technological finesse of a four-slice toaster—and is about as profitable. As spreads between stocks and futures prices have turned razor-thin, most of the giant program traders have

retreated, with Merrill, Dean Witter, and Salomon having pulled out entirely. But index arbitrage has managed to survive—and even thrive—in its new incarnation. Today, index arbitrage has come into its own not as a stand-alone money-maker but rather as a hedging technique for sophisticated options and swap contracts. And that's good news for the stock market, because the new index arbitrage is far less likely to be blamed for market turmoil.

COMMON THEME. Statistics released each week by the New York Stock Exchange show how the new program traders stack up (table). At the top of the heap in volume in recent months has been the U.S. arm of the Japanese brokerage giant Nomura Securities International Inc. High in the rankings is another foreign-owned brokerage, UBS Securities Inc., the ambitious, rapidly expanding New York-based trading operation of Union

Bank of Switzerland. Meanwhile, white shoe investment banker J. P. Morgan Securities Inc., while not engaged in program trading as of yet, has hired an ac trader from Merrill Lynch & Co. to get started in index arbitrage. These three firms have one thing in common: Each is establishing a presence in the lucrative high-tech world of custom-designed equity options—"derivatives" in Street lingo—and swap contracts.

The continued resilience of index arbitrage reflects the vast growth of custom-designed options and swaps. These new financial instruments are light years ahead of the options and futures contracts that are traded on the exchanges. The exchange-traded options and futures contracts that are widely available to ordinary investors do little more than give people the ability to bet on market indexes or stocks over a short period of time—weeks or months at the

most. The new kinds of options are custom-tailored deals more than they are financial products. For pension funds, insurance companies, and other institutional investors, these custom options and swaps are an easy, low-cost way to reduce the risk of their portfolios or to quietly shift from one form of investment to another.

This largely unregulated, multibillion-dollar business is dominated by a handful of companies, notably Bankers Trust and Salomon in the U.S. and Cr dit Suisse and Soci t  G n rale in Europe. Their ranks are being swelled by a number of upstarts attempting to enter the business, including Nomura and UBS. For them, program trading is a crucial hedging mechanism.

OLD FEET. Here is how a typical equity swap would work—and how, traders say, program trading comes into play:

An investor with a portfolio mirroring the Standard & Poor's 500-stock index gets cold and wants to withdraw from the market without actually selling his stocks. So the investor agrees with a "counterparty"—a bank or broker—to engage in a swap. The investor agrees to pay to the broker the total return (dividends plus price change) on the index for a period of time, receiving from the broker, in return, the London interbank offered rate minus a commission (perhaps 15 basis points or so). LIBOR is the rate international banks charge each other for large loans.

But this transaction gives the brokerage a stake in the market—just what it doesn't want. Brokerages set up options and swaps to make a low-risk buck, not bet on the vagaries of the market. If stocks decline during the term of the swap contract, the brokerage loses money. To hedge against that risk, the brokerage will nullify its exposure to the S&P 500 index by either selling index futures or options—or stocks in the index—depending upon which is priced higher at the time.

That's where program trading comes in. The hedge must be continually adjusted during the life of the swap contract, sometimes for years, and that means that baskets of stocks or futures contracts must be bought and sold.

While engaging in those trades, the brokerage may simultaneously buy or sell related futures or stocks and make money via index arbitrage. Even though the profits from index arbitrage are small, they are enough to make adjusting the hedge a more pleasant pastime.

Officials at UBS, which has ambitious plans to enter the global derivatives business, say the firm's ranking in the Big Board's weekly program-trading statistics is pretty much a result of that kind of hedging. Such trades, they say, are but the "tip of the iceberg" of the firm's custom swap and options business. At Nomura, likewise, index arbi-

a swap where the bank assumes the responsibility to pay the LIBOR in return for accepting the S&P, for example, it would try to find another institution that was willing to accept the S&P and pay the LIBOR. "The amount of activity directly traceable to our hedging activities is kept to a minimum because the bank wants to do as many offsetting trades as possible," observes Dean D'Onofrio, who heads Bankers Trust's U.S. equity derivatives operations.

CALMER WATERS? To the extent that program trading is motivated by a need to hedge derivatives, the market will probably benefit. For one thing, traders who

are engaged in hedge-related index arbitrage are unlikely to engage in a practice known as "legging," in which a stock basket is bought or sold some time prior to the transaction in the futures or options market. Legging transactions have come under criticism for moving the stock indexes, contributing to volatility. But moving the markets runs counter to the market-neutral motivation of swap and options hedging. "People do it," concedes one Nomura exec. "We don't."

The need for index arbitrage as a hedging device will probably decline as customized swaps and options proliferate and even small players find counterparties on both sides of each transaction. If so, spreads will widen—and profits will increase for

the diehard index arbs from the 1980s who stuck with that business through thick and thin. And none has shown more loyalty to index arbitrage than Philadelphia's Susquehanna Investment Group, one of the most innovative and active members of the tribe. Susquehanna is the only firm that loomed large in the NYSE program trading rankings in 1988 and still remains a major player to this day. But even though Susquehanna is committed to index arbitrage as a stand-alone technique, it is not turning up its nose at the world of custom derivatives. In recent weeks, it has entered into an alliance with Chase Manhattan Bank to develop sophisticated currency options. The traders at Susquehanna know better than to put all their eggs into one basket. After all, that's what hedging is all about.

By Gary Weiss in New York

THE TOP 10 INDEX ARBS: HOW THE RANKINGS HAVE CHANGED

Name of firm and monthly number of shares traded using index arbitrage*

1988		1992	
	Millions		Millions
MERRILL LYNCH	45.1	NOMURA SECURITIES	34.6
MORGAN STANLEY	38.1	SUSQUEHANNA	29.8
BEAR STEARNS	26.5	KIDDER PEABODY	26.3
LIT AMERICA	26.4	FIRST BOSTON	26.0
SUSQUEHANNA	19.1	UBS SECURITIES	21.3
DEAN WITTER	14.9	THOMAS WILLIAMS	10.6
KIDDER PEABODY	10.4	MORGAN STANLEY	9.6
PAINEWEBBER	7.2	LIT AMERICA	8.2
SALOMON BROTHERS	6.7	PAINEWEBBER	1.9
GOLDMAN SACHS	6.0	DAIWA SECURITIES	1.3

*Rankings and number of shares compiled from first NYSE monthly statistics for July, 1988, and the four weeks ended April 16, 1992; July, 1988, figures are adjusted for one additional trading day in that month

DATA: NEW YORK STOCK EXCHANGE

trage is used to hedge derivatives, while also giving the firm a presence in futures and stock-basket trading as its equity options business is built up. It's a process one Nomura executive likens to an athlete keeping in shape. "You have to train every day," he says. "In trading you have to trade every day, so that when a client comes in you can trade effectively. We want our traders to trade as much as they can."

Such giants in the swaps and options business as Bankers Trust and Salomon don't have to engage in program trading to hedge their deals and contracts. The reason is simple: Their volume of business in swaps and options is so large that such hedge-related program trading is unnecessary. Bankers Trust Co., for example, immunizes itself from market risk by finding other counterparties to take the opposite side of transactions. In

Commentary/by Howard Gleckman

WHY CHAPTER 11 NEEDS TO BE REWRITTEN

Bankruptcy is great for business these days. That is, great for lawyers, investment bankers, and consultants. And all too often, for corporate managers, who get to keep their failed enterprises alive—along with their salaries and bonuses. It's not so great for creditors, who often end up with very little.

No wonder Chapter 11 is appealing to the management of troubled companies. It allows a financially strapped business to hold creditors at bay while it tries to turn itself around. More than 70,000 businesses filed for bankruptcy in the past year, including 125 publicly held companies with total assets of more than \$80 billion.

The problem is that bankruptcy courts allow these cases to drag on for years, depleting assets. And one major reason cases go on forever is that bankruptcy judges are often asked to deal with issues such as labor disputes, pension-plan financing, and environmental liability.

Manville Corp., for example, got into trouble when it began losing lawsuits claiming that contact with the company's asbestos caused illnesses and deaths. In 1982, Manville filed for bankruptcy, which lasted six years. In the end, it was a bankruptcy judge who decided how much the plaintiffs would collect.

A bankruptcy court's inability to resolve a complex pension dispute among LTV Corp., its workers, retirees, and the federal government has kept the company in Chapter 11 since 1986. During this time, the Dallas-based conglomerate has spent \$162 million on fees to lawyers and consultants. Meanwhile, under the latest reorganization proposal, creditors would get 4¢ to 53¢ on the dollar.

TIME LIMITS. Too frequently, bankruptcy judges allow managers to drain a company's remaining assets in an ultimately futile effort to save it. In 1989, Eastern Air Lines Inc. used Chapter 11 to try to bust its unions. A bankruptcy judge allowed Chief Executive Officer Frank Lorenzo to run the airline for

another year, during which it lost more than \$1 billion. A court-appointed trustee took over the next year, and most of the remaining assets dwindled away. The once proud carrier was liquidated in 1991.

Before 1978, most bankruptcies ended in rapid liquidation. Then, Congress rewrote the law in an attempt to keep

the deadline is rarely enforced for companies with sharp lawyers. As disputes drag on, assets are depleted and negotiating positions harden. It might make sense to set a deadline of six months or a year, then stick to it. "Bankruptcy is like open-heart surgery—the longer you stay under the knife, the lower the chance of success," says James

E. Spiotto, a creditors' lawyer with Chapman & Cutler in Chicago. "We should be shooting for a quick, efficient way to give companies a fresh start."

COSTLY DISPUTES. Another needed change is removing broad social questions from the bankruptcy process. Congressional failure to grapple with such issues as product liability, pension reform, and environmental cleanups has dumped these tangled and costly disputes onto bankruptcy judges' dockets. If lawmakers want to correct the underfunding of retirement plans, they should do it by fixing federal pension laws.

And bankruptcy judges have to realize that some sick companies should simply be allowed to die—and quickly. Maintaining them on life support ultimately serves no one's interest.

Radical reformers aren't satisfied with tinkering. In a controversial Yale Law Journal article,

University of Michigan Finance Professor Michael H. Bradley and Atlanta lawyer Michael Rosenzweig say the current system of judicial protection and supervision should be trashed. Instead, they propose a kind of auction, in which shareholders and creditors would be given an opportunity to gain control of the company by raising the cash needed to pay the bills. Says Bradley: "When you get into Chapter 11, the question is: Is this more valuable alive than dead? The market is a better judge of that than a bankruptcy judge."

Such remedies would surely run into heavy opposition. But Chapter 11 is bankrupt. Unless confidence in the system is restored, radical change may be the only solution.



insolvent companies alive, believing that this was best for managers, employees, and creditors alike. It hasn't worked out that way. Before the reform, 90% of Chapter 11 filers were liquidated. Now, up to 80%, mostly small businesses, die. Large public corporations with the ability to hire high-priced legal help have the best chance of making it.

A system that hurts creditors and shareholders while benefiting lawyers, consultants, and managers needs fixing. What should an overhaul of bankruptcy law aim for? One valuable change would be limiting the time a business has to file a reorganization plan, the most important step toward restoring a company to health. A debtor is supposed have only 120 days, but

"To me, all these advances in personal computing are meaningless unless they make my job easier. Period."

Whether you're responsible for 5,000 desktop computers or just the one in front of you, all the PC power in the world doesn't really matter if you can't figure out how to make it work for you.

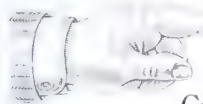
At Microsoft, we've always felt the personal computer should be just that – personal. There's little use in technology racing ahead if it leaves people behind.

That's why we never stop working at making your basic computing tasks easier. And making the more complex tasks easier, too.

And that's why you'll see this commitment reflected in the three new words next to our name: Making it easier.

Products that are productive.

Like the industrial revolution, the PC revolution has changed the way people work and the way people live. In 1985, we set out to smooth the way with the Microsoft



With Windows, you can point and click to do your work.

Windows™ graphical environment. Graphical computing in Windows has proven to be an easier, more intuitive way for people to get all of their work done – more so than typing the /c command.

You no longer have to memorize a cumbersome chain of commands or a dictionary-sized manual to get work done.

Now you can simply point and click to change fonts, add columns of numbers, reformat documents and more.

Today, there are thousands of applications for Windows that



We listen to you – on the phone, in letters, at trade shows – so we know how to make the computing tasks you do most often easier.

you can do this with, including Microsoft Word for Windows and Microsoft Excel for Windows.

And because all Windows-based applications have a common interface, once you've learned one, you're well on your way to knowing the next. And the next.

The result? People can do more, faster. For businesses, that means a better return on hardware and software investments, in the form of greater productivity and a lower learning curve.

Are we there yet?

Computers have certainly gotten easier for people to use in

the last 10 years. That doesn't mean they can't be easier still.

That's why we test applications in development at the Microsoft Usability Labs – to make certain that new features are not only useful, but very usable.



This has produced innovations like the Toolbar, which automates your most frequently done tasks, and Wizards, step-by-step guides that let you accomplish work even while you're learning.

Soon, you'll be able to sit down at any computer, anywhere, and get the information you need. And make the changes you need. And get the results right away. No matter what application you're in.

Because our aim is to make computers every bit as simple and reflexive to operate as your TV or car or phone.

And that's why, when we say "Making it easier," we're not just talking about making your work easier.

We're talking about making your job easier. And your life.

Could computing be easier at your company? Call (800) 992-3675, Dept. A53, and we'll send you a free brochure about applications for Windows.

Microsoft
Making it easier

PLASTIC—FOR A PRETTY PENNY

The 'secured' credit card gives bad-risk customers high-cost credit

What's the best way to make money in the credit-card business? To most card issuers, the answer is easy: Go after the best risks. But as the battle to sign up the cream of the creditworthy has intensified, a few enterprising bank issuers are targeting a different group: the worst risks, a group that has been growing rapidly since the recession began battering consumer balance sheets. Banks are finding they can make high profits from high-risk customers with a relatively new kind of credit card: the "secured" card.

The secured card works this way: The cardholder must put up collateral in the form of a security deposit at the bank, which is usually equal to the credit limit on the card. While issuers of standard credit cards, due to heavy competition, are having to reduce rates and fees to attract creditworthy customers, marketers of secured cards are under no such pressure. They're finding that people with poor credit histories are so anxious to get credit that they're willing to pay interest rates as high as 22%, nonwaivable annual fees ranging from \$20 to \$75, and in some cases, application fees as high as \$65. Customers are also willing to put up with relatively low interest rates—and sometimes even no interest rate—on their deposits. While only 450,000 secured cards are in use now, estimates of the eventual market run as high as 30 million.

SCAMSTERS. Despite some risks, secured cards can be considerably more profitable—higher revenues and lower losses—than conventional credit cards. "Basically, you're lending someone back their own money and charging them a lot of money for it," says John M. Stein, an associate in the financial-services practice of Chicago-based consultants MAC Group/Gemini. He figures that on

an outstanding balance of \$1,000, a bank offering a card with an 18% rate and paying 5% interest on a cardholder's deposit can make as much as a 5% to 7% aftertax return on assets. That's compared with an industrywide ROA on unsecured cards of from 2% to 3%, down from around 4% in the 1980s, according to RAM Research. Most banks won't disclose the return on their programs, but Key Federal Savings Bank in Maryland cites a 3.67% pretax return.

WHY BANKS CAN MAKE RICH PROFITS FROM POOR CREDITS

FEW BIG COMPETITORS

Unlike the conventional credit-card business, there are relatively few major players that offer secured cards, which means higher rates and fees

LESS CUSTOMER PRICE-CONSCIOUSNESS

Desperate for credit, people with bad or insufficient records are less sensitive to high rates and fees

SMALLER RISKS

Issuers are protected because holders of secured cards must leave money on deposit at the issuing bank, which typically pays little if any interest on the money

NEW BUSINESS SOURCE

Once they rebuild their creditworthiness, secured card holders may be open to many other bank products

DATA BW

Interest in secured cards is growing rapidly. In the past year and a half, the number of banks in the MasterCard system with active secured-card programs has jumped from 13 to 29. Eight of the banks have over \$1 billion in assets. Just 18 months ago, none of the banks offering secured cards had more than \$200 million in assets. The field has also attracted a rash of telemarketing scammers, who cheat customers out of exorbitant application fees.

Not surprisingly, the biggest bank testing the secured-card market is Citibank. "Citi has traditionally had a higher risk appetite than any of the other card purveyors, and it has always said, don't look at the credit losses, look at the return," says Donald E. McNeese, head of the financial institutions consulting practice at Towers Perrin's New York office.

Citibank launched a secured-card pilot program in June, 1991, by direct mail and is expanding the test. The secured card, which looks identical to Citi's standard card, carries a 19.8% annual percentage rate compared with the 15.9% that will be charged to Citi's best standard-card customers starting this June. Unlike many other secured-card issuers, Citi will not give cards to people who have declared bankruptcy. To get a card, customers must deposit between \$30 and \$5,000 with the bank in an 18-month certificate of deposit paying 5% in interest. After a year and a half, cardholder who maintain a good credit history can "graduate" to the unsecured program.

'TURNDOWNS.' The bank will say only that it mailed applications to "tens of thousands" of people, but it adds that it has received an "amazing" number of calls for applications from people who hadn't been in the mailing but had heard about the program. Citi recruits many

customers from its "turndowns," applicants for regular cards who can't meet the credit requirements.

The key to the secured-card business is controlling losses. MAC Group/Gemini's Stein estimates losses on secured cards to be about 1% to 2%, vs. around 4% to 5% for typical unsecured programs. "What drives losses is how organized and operationally capable the bank is," says Nigel W. Morris, who heads the secured-card business for Richmond (Va.)-based Signet Bank.

To hold down losses, banks need to monitor accounts much more carefully than with standard credit cards. Poor management has sunk unsophisticated banks. Recently, an experiment with only partially secured cards at Larchmont (N.Y.)-based American National Bank of New York resulted in losses of \$3.83 million on loans of \$15.9 million for a quarterly loan-loss ratio of more than 20%. The bank became insolvent and was eventually liquidated. Yet even banks that require deposits equal to the credit limit have a much higher risk of loss than issuers of regular cards if cardholders exceed credit limits.

Catering to a customer base that has a history of money problems is never easy. But for banks able to manage the process, battered consumer balance sheets may turn out to be a gold mine.

By Suzanne Woolley in New York

ДОРОГАЯ АННА,
 вот тебе самые свежие
 яйца и бутылка
 водки.
 С любовью,
 Пётр Великий

Love Russia 1906-

FRESH EGGS AND TOAST.
 Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.
 And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.
 United's international First Class. For those accustomed to excellence in every detail.
 Come fly the airline that's uniting the world. Come fly the friendly skies.

 UNITED AIRLINES

ДОРОГАЯ АННА,
 вот тебе самые свежие
 яйца и бутылка
 водки.
 С любовью,
 Пётр Великий

Love Russia 1906-

FRESH EGGS AND TOAST.
 Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.
 And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.
 United's international First Class. For those accustomed to excellence in every detail.
 Come fly the airline that's uniting the world. Come fly the friendly skies.

 **UNITED AIRLINES**

FRESH EGGS AND TOAST.

Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.

And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.

United's international First Class. For those accustomed to excellence in every detail.

Come fly the airline that's uniting the world. Come fly the friendly skies.

 **UNITED AIRLINES**

FRESH EGGS AND TOAST.

Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.

And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.

United's international First Class. For those accustomed to excellence in every detail.

Come fly the airline that's uniting the world. Come fly the friendly skies.

 **UNITED AIRLINES**

FRESH EGGS AND TOAST.

Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.

And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.

United's international First Class. For those accustomed to excellence in every detail.

Come fly the airline that's uniting the world. Come fly the friendly skies.

 **UNITED AIRLINES**

Дорогая Анна, это письмо пишу тебе 9го апреля. В сообщении тебе пишу про Beluga caviar, Absolut и Dom Perignon.

Love, Anton 1906

FRESH EGGS AND TOAST.

Beluga caviar, from Russia with love. You can savor this delicacy once reserved for royalty in our international First Class cabins.

And, as you'd expect, you'll find it accompanied by vodka and champagne. Only Absolut and vintage Dom Perignon, respectively.

United's international First Class. For those accustomed to excellence in every detail.

Come fly the airline that's uniting the world. Come fly the friendly skies.

 **UNITED AIRLINES**

Дорогая Анна, это письмо пишу тебе 9го апреля. В сообщении тебе пишу про Beluga caviar, Absolut и Dom Perignon.

Love, Anton 1906

WHY BIOTECH STOCKS MAY BE SICK FOR A WHILE

The industry is in a research phase, and new drugs are a ways off

Bothell, Wash., is a long way from Wall Street. But for small, public biotech companies these days, there is nowhere to hide from shell-shocked investors. Just ask Janice M. LeCocq, chief financial officer for Bothell-based Icos Corp., who is now fielding a half-dozen telephone calls every day from anxious investors asking for news of a product that would boost the company's stock price. Shares of Icos are trading at around 9 these days, down from their 52-week high of 21.

Investors, wowed by the metaphysics of biotechnology in 1991, are now grappling with Newton's law of gravity. Last year was one of astounding, at times even irrational, popularity for the gene jocks: Many key biotech stocks more than doubled in price. Even savvy investors who questioned a company's prospects at 15, suddenly couldn't buy enough shares at 40. Since January, though, the stocks as a group are off about 35% in an otherwise up market (chart). "What we had was pure and simply a correction from speculative excess," says Jeffrey W. Casdin, a biotech analyst with Oppenheimer & Co. He believes biotech has further to drop. Hambrecht & Quist Inc. bio-stock watcher Jacqueline G. Siegel says many of her institutional clients have abandoned the sector altogether. Says Siegel: "It's going to take very selective investing to make money."

SELLING PRESSURE. Biotech stocks have often suffered these sudden nosedives. Typically, they are triggered by a leading company's spectacular bellyflop. The last was in 1988, after longtime highflier Genentech Inc. brought out TPA, a widely heralded drug for heart attack patients. Its disappointing sales sent biotech stocks into a two-year spell of malaise.

This recent sell-off is a bit more complex. Broad market trends resulting from hopes for an economic recovery are partly to blame. In January, investors began taking profits in their biotech

portfolios and shifting to cyclical, which traditionally do well during a recovery. Another factor: The flood of mid-1991 biotech stock offerings included provisos that inside investors couldn't sell their shares for six months. Those began expiring just recently, creating more selling pressure.

Then, true to history, a leading compa-

also led to the shelving of several planned new issues.

The trouble for biotech companies is that they are now moving into a heavy research phase, when dazzling new products are scarce. Icos and other hot startups raised sizable war chests last year with the expressed goal of "lying in the weeds and getting the research done," says Icos' LeCocq. Wall Street does not expect any high-profile drug approval until 1994. Investors get very restless when the only things coming out of the companies for a while are bleary-eyed scientists.

Prices may get some help from corporate buyouts. With many biotech stocks battered, analysts predict that a few biotech companies might go shopping—and pay tidy premiums. The Street is nursing rumors that Merck and Eli Lilly

could be interested in Centocor. Neither Merck nor Lilly returned calls asking for comment, and Centocor says only that it is interested in a variety of "collaborations." It had better ink them fast, however: The company, which has revenues of \$75 million in the past 12 months, is currently burning cash at the rate of \$50 million per quarter.

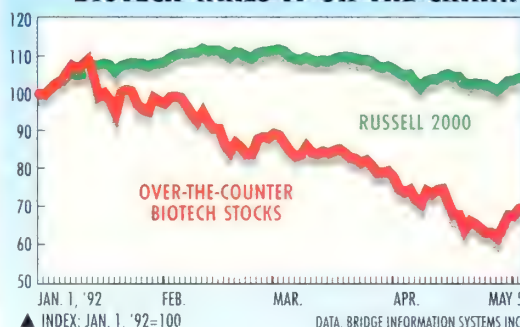
SOME GOOD BUYS? The irony of the biotech plunge is that it seems so removed from the fundamentals of the industry. Never has biotech's promise been brighter: It is fast revolutionizing the drug industry. And a slew of exciting products from veteran companies such as Genentech, Chiron, and Biogen, as well as younger companies such as ImmuLogic, are in early stages but on track—although some of these kicked-around stocks may prove to be good buys now (table).

Yet for the time being, good news from biotech companies doesn't have its old impact. It takes a lot more to impress investors than it used to. Last year, a company that reported progress even in very early research saw its shares rise dramatically. The day before its May 5 announcement that it had won FDA approval for an anti-cancer agent called Proleukin, for example, shares of Chiron shot up by more than 6 points. But Chiron's stock is still 40% below its 52-week high.

During their recent popularity, biotech companies had hoped that, this time around, they were attracting long-term investors. Sorry. Any near-term revival for the biotech group will require a miracle drug.

By Joan O'C. Hamilton in Bothell, Wa.

BIOTECH TAKES IT ON THE CHIN...



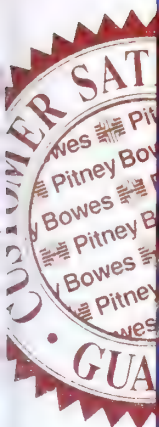
...BUT THESE STOCKS MAY COME BACK

	Latest price*	52-week high	
CHIRON	46 5/8	79	Must swallow Cetus acquisition but just received approval for cancer drug
BIOGEN	24	49	Strong management, strong balance sheet. Is developing product to fight blood clots
IMMULOGIC	11 3/8	25	Longer-term play. Has promising drug in testing to combat allergies
COR THERAPEUTICS	11 1/8	22	High hopes for drug being tested to help treat heart attacks

*As of May 6, 1992

DATA: BRIDGE INFORMATION SYSTEMS INC., BW

ny's fall touched off broader selling. On Apr. 16, Centocor Inc. announced a regulatory setback: The imminent approval everyone expected for its infection-fighting drug HA-1A, or Centoxin, wasn't going to happen. The Food & Drug Administration had doubts about its medical powers and wanted more research data. This news torpedoed the stock. After hitting a high of 60 last year, Centocor is now trading around 12. That news not only pulled other biotech stocks down, it



"CSX Transportation is spread all up and down the eastern seaboard. So we rely on fax machines for sending everything from bills of lading to employee time cards."

"Right now we've installed over 1200 Pitney Bowes fax machines...and we are updating our older equipment as fast as we can. Because for every existing fax machine we replace with a Pitney Bowes machine, we're saving money."

"Pitney Bowes fax machines give us the cost, service, and reliability we're looking for."

"We don't have any problems with service, there's very little upkeep, and anytime I have a question about the sale of a new machine or billing, one call gets me through to my rep and he takes care of it."

"Pitney Bowes makes you feel like you're the customer."

At Pitney Bowes, customer satisfaction is a commitment that's at the very fiber of our business. It shapes the attitudes and actions of our people. And it's reflected in the quality and reliability of our products. What's more, we back it up with our Customer Satisfaction Guarantee.SM For more information, call 1-800-MR BOWES ext. 1055.

"Pitney Bowes has replaced over 1200 fax machines for us...and we're ordering more. Every one we add saves us money."

Steve McCann
Manager, Office Equipment
CSX Transportation

 **Pitney Bowes**

Facsimile Systems

Stamford, CT 06926-0700
Telephone: 1-800-MR BOWES

Postage Meters • Mailing, Shipping, Copying, Dictation, Facsimile and
Bar Code ID Systems • Facilities Management • Equipment Leasing

BY GENE G. MARCIAL

THE DISK-DRIVE MAKERS MAKING TRACKS

At Hambrecht & Quist's recent technology conference in San Francisco, money managers weren't quite sure whether the high-tech stocks, which have slumped some 10% to 20% so far this year, have bottomed out. The cautious presentations made by most technology companies added to their unease. But some smart investors are beginning to snap up shares of a few high-tech companies they think are looking upbeat.

One group getting attention is computer disk-drive manufacturers. "They were just about the only good, positive story in high tech," says Mike Murphy, editor and publisher of the *California Technology Stock Letter*. Disk-drive makers have posted upside earnings surprises, and they're likely to beat Street estimates again in the coming quarters, adds Murphy.

His picks: Conner Peripherals, Quantum, and Seagate Technology. They have all fallen sharply from their highs, but Murphy sees them rebounding smartly. "In this kind of an uncertain environment, they are among the best buys because the risks in owning them are quite low at this point."

REVENUE PUSH. Murphy notes that Conner, a major maker of high-performance 2½-inch and 3½-inch Winchester disk drives, posted earnings of 42¢ a share in the first quarter vs. the Street's estimate of 38¢. In the quarter ending June 30, 1992, most analysts are looking for 40¢ to 50¢; Murphy believes Conner will earn 70¢. Disk drives are used to record, store, and retrieve digital information in desktop and workstation computers, as well as notebook and laptop models. Conner has been expanding aggressively and has \$1 billion in cash. Murphy says that the company is exploring opportunities outside its traditional business. A spokesman confirmed that Conner wants to broaden its markets.

Quantum, a leading supplier of hard-disk drives used in PCs and desktop stations, also topped estimates of 30¢ a share for its most recent quarter, reporting 38¢. For the June quarter, analysts expect flat earnings, but Murphy is convinced Quantum will do 50¢. Quantum has grown rapidly in three years, pushing revenues over \$1 billion.

MURPHY'S HIGH-TECH BUYS...

Stock	52-week high	Recent price	'92 target
CONNER PERIPHERALS Expanding aggressively	23	21	30
QUANTUM Fast revenue growth	18	15	22
SEAGATE TECHNOLOGY Sharp earnings rise	16	15	23
...AND A SHORT			
SUN MICROSYSTEMS Intense competition	37	28	20

DATA: BRIDGE INFORMATION SYSTEMS INC.

And Seagate, a large maker of rigid magnetic disk drives for various computer systems, including the supercomputer, earned 59¢ in its March quarter vs. estimates of 50¢. Seagate should earn \$1 in the June quarter—exceeding Street estimates of 76¢, says Murphy.

The stock to short? Sun Microsystems, according to Murphy. "It's a good company, but revenue growth has been slow, and the company may produce an unpleasant earnings surprise for the year," he adds. Price cutting and stiff competition from IBM and Hewlett-Packard have affected sales and earnings, says Murphy.

A REAL STUNNER OF A STOCK?

Investment pro Andy Lanyi, who has been scouring the batch of recent IPOs for small companies with significant stakes in niche businesses, thinks he's found a potential home run: Premier Anesthesia. A provider of anesthesiology services to 24 hospitals in 16 states, Premier "is growing rapidly and could become a factor in hospital services," says Lanyi.

The stock jumped quickly to 12½ the day after the company went public at 11 on Mar. 4. It has eased to between 10 and 11 since then. The company has 75 anesthesiologists and some 60 "certified registered nurse anesthetists" under contract. In checking with some Premier customers, Lanyi found most hospitals need to strengthen their anesthesiology departments. Once they sign up with Premier, he says, the company takes over and streamlines operations, including billing and collection.

Demand for the services has been so strong, says Lanyi, that Premier reported record first-quarter revenues of \$12.6 million, up 47% from last year, and earnings of \$388,000, or 6¢ a share up from 3¢ a year ago. For all of 1992 Lanyi figures the company will earn 35¢ a share vs. 14¢ a share last year. In 1993, Lanyi expects revenues to jump to \$116 million from \$70 million this year, with earnings rising to 65¢ a share. The stock is trading at a steep price-earnings ratio of 31, but analyst Barry King of Ladenburg Thalmann shows little concern. "With Premier's rapid growth, the high p-e isn't a worrisome factor," says King.

PLACE YOUR BETS ON THIS GAMBLER

International Totalizator Systems sounds as if it belongs in the Terminator's arsenal. It doesn't. It's in the gambling business, and the stock is starting to catch fire. ITS, a major maker of computerized lottery and pari-mutuel wagering systems, derives 90% of its sales overseas. Most stocks related to gambling have been on the ropes recently, but ITS has been on the go, rising from 2 in December to 4½.

What's the scoop? ITS, whose pari-mutuel equipment is already used to service the horse racing industry in Britain and Hong Kong, has been signing up new businesses. It has also held talks with officials in the former Soviet republic of Georgia as well as Hungary and Romania to set up lotteries in those countries.

China has made inquiries as well. A lottery system in Georgia could generate revenues of \$4 million for ITS, figures Charles LaLoggia, editor and publisher of the *Special Situation Report* in Rochester, N.Y. ITS signed a contract in late March with Papua New Guinea to provide a turnkey system for a national lottery: It will ship 100 wagering terminals in July of this year and an additional 200 terminals over the next four years.

ITS, which is now in 15 countries plans to widen its 10% share of the U.S. market, says Chairman and CEO Jim Walters. Already, ITS supplies the wagering equipment at Churchill Downs in Kentucky. "We have received numerous inquiries in North America," says Walters.

ITS could well exceed in 1992 its 1991 sales of \$29 million and net of \$1.1 million, or 18¢ a share, says LaLoggia. He thinks the stock is worth 10.

**WE HAVEN'T CHANGED
OUR POSITION ON
WORKERS COMPENSATION
IN OVER 50 YEARS.**

SURPRISE! THE NEW IBM REALLY LOOKS NEW

Several of its autonomous divisions show startling vitality

When John F. Akers announced last December that IBM's divisions would now run as more or less separate businesses, free to do "whatever they want" and pull IBM out of its long slump, Show me, responded a chorus of disillu-

sons. After six years of failed turn-

natural, IBM's stock kept diving—to But guess what? Now, several of Big Blue's lines of business, or LOBs, are actually showing startling signs of vitality and flexibility. They're breaking old rules and writing new ones. The company's personal-computer unit, for instance, announced on May 5 that it's diving into the mail-order business. Taking orders for PCs over the phone may not seem like a Big Blue thing to do, but it just might regain market share.

'HYPERACTIVE.' And IBM divisions are moving swiftly to shed their losers. On May 7, Ellen M. Hancock, general manager of IBM's Networking Systems business, was scheduled to announce that the company is unloading its last stake in Rolm Co., the money-losing maker of office-phone systems it bought in 1984 for \$1.6 billion. IBM sold Rolm's manufacturing unit

in 1989. Now, Siemens is buying the rest for an undisclosed price. Hancock says the sale "was really led by our line of business." She reviewed it with Akers only after discussions had begun.

Indeed, all over IBM, executives are suddenly eager to cut deals with anybody who can give them a shortcut to the technologies, products, and markets



CHAMPIONING IBM
HANK HANCOCK
POWER POINT
THE IBM

they need (table). The PC division, for example, is negotiating deals with other computer makers, including PC clonemaker Northgate Computer Corp. Lucie J. Fieldstad, vice-president in charge of IBM's Multimedia Group, says she's studying possible linkups with major entertainment names, such as Time Warner, Disney, MCA, George Lucas, and Steven Spielberg. Her mission: give IBM a major role in the merging worlds of computer and television.

When it comes to dealmaking, "IBM's getting hyperactive," says Joseph F. Schoendorf, a partner at San Francisco-based Accel Partners, a venture-capital firm that is working with IBM on a deal with startup Parallax Computer Inc. (table). "It's seriously changing the way it's doing business." One recent example: Rather than wait for its own designers to come up with a new kind of computer to anchor networks of workstations, IBM is turning to startup Auspex Systems Inc. In the past, sheer pride would have prevented such a deal.

Competitors and customers meanwhile, report that you can now negotiate for just about anything made by IBM's divisions. That includes not just complete computers but also bits of software, disk and tape drives, and microchips. The LOBs are swimming in excess manufacturing capacity, says Robert Djurdjevic, president of Anne Research Corp., a market researcher. "so anything is fair game."

ANYTHING GOES. And no customer are off-limits, it seems. Under the old rules, top management would routinely quash any deals with outsiders that might hurt another IBM division. No more. IBM's data-storage division, for example, now called Adstar, recently shipped drives to outside customers before the product was introduced in an IBM computer. That would have been unthinkable a year ago.

Similarly, FileNet Corp. ju

IBM: LET'S MAKE A DEAL

Since its management shakeup and reorganization last December, IBM has moved swiftly to close deals

ROLM

A sale, for an undisclosed price, of IBM's stake in the networking and equipment maker

SAPIENS

A minority stake in this developer of software for mainframe programmers

TIME WARNER

A proposed deal to use IBM networking technology to deliver Warner movies to homes*

NORTHGATE

Expected equity stake in maker of mail-order PCs

PARALLAN

A likely stake in this builder of network servers

GROUPE BULL

A \$100 million equity stake in France's state-owned computer maker, aimed at developing new computers

AUSPEX

A joint development program with this builder of servers for workstation networks

*IBM deal with MCA, Disney, George Lucas, and Steven Spielberg about electronic media deal.

LIBERTY MUTUAL LEADER IN WORKERS COMPENSATION SINCE 1936.

Liberty Mutual has been the leading writer of workers compensation for over 50 years.

It's a position we've earned by working with our customers on the issues that matter most: controlling workers compensation costs through innovative loss prevention and effective claims management.

COST REDUCTION THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is analyzing the causes of workplace injuries to improve occupational safety. For our customers, that research means Liberty's 750 local loss prevention specialists provide leading edge safety consultations, including ergonomics and customized safety programs.

COST CONTAINMENT THROUGH CLAIMS MANAGEMENT

When an employee is injured on the job, we apply unmatched experience to provide the most appropriate medical treatment, and return that person to work as soon as possible.

That's because managed care has been our strong suit for decades. We pioneered return to work programs. We have the only rehabilitation center of its kind in the industry. Our groundbreaking program of panel physicians was a forerunner of today's Preferred Provider Organizations (PPOs). Now LibertyPREFERRED CARE is one of the industry's most effective nationwide

PPO networks. Our medical cost containment programs saved our customers over \$170 million last year.

Fighting fraud through innovative programs, like special investigative units, is another important way we work to control costs.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As the industry's leader, we're working together with our customers and their trade associations, state legislators and labor in the fight for reform. And we'll keep working with them until workers compensation accomplishes its mission: helping injured workers return to work by assuring quality medical care and fast benefit payments.

At the same time, meeting the needs of our customers in difficult states requires innovative solutions. That's why we pioneered a large deductible policy. For self-insured employers, we expanded our Helmsman services with flexible plans.

THE DIRECT WRITING ADVANTAGE

Our leadership position demands a passion for service. As a direct writer, we can more readily provide the service customers need because partnership is built into the way we do business. By working together, we can more effectively control costs.



FACING THE ISSUES THAT FACE OUR CUSTOMERS

Information Processing

signed a contract to resell IBM's RS/6000 computers as part of its document-imaging systems. The deal went through despite IBM's earlier investment in another company that uses RS/6000s for imaging—and a major internal effort to sell imaging on IBM mainframes. Filenet Chief Executive Ted Smith says he was surprised at the lack of internal flack at IBM. The corporate types whom he expected to slow down or block the deal "got out of the way and stayed out of the way," he says.

MORALE BOOST. Nowhere is the new IBM more evident than in its PC group, led by General Manager James A. Cannavino. His goal is to make IBM a leader once again in PCs and to fight Sun Microsystems, Hewlett-Packard, and Digital Equipment in engineering workstations. IBM insiders say Cannavino helped spearhead the December reorganization, and since then he has pushed autonomy well down into his organization. "Cannavino has created a real sense of urgency among his troops," says Accel's Schoendorf, "and he has empowered them to do something about it."

Cannavino has become one of IBM's leading wheeler-dealers, too. Since putting the finishing touches on Big Blue's

historic linkup with Apple Computer Inc. last fall, he has been chasing after new deals. On May 12, he is expected to announce two: the Northgate investment—possibly an outright buyout—and a stake in Parallax, which makes "super-server" computers that dish out information to networks of PCs. Cannavino started discussions with Parallax between sessions at a computer conference

Money-losing businesses are being lopped off, and the PC unit is rushing into mail order

on the French Riviera last September.

The prospect of these deals and the quickened pace are lifting morale at Personal Systems, which has seen its share of the PC market slip from 27% in 1985 to 15% in 1991. "It's a very invigorating environment," says Fernand B. Sarraz, assistant general manager of Personal Systems. The PC business now, he says, is essentially several small companies

addressing their own markets—desktops, portables, servers, and software—for instance. "Each is measured as business unto itself," mainly in terms of return-on-assets, Sarraz says. "There's a lot of accountability."

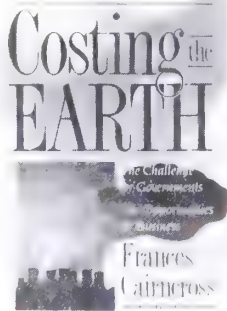
The result has been an intense market focus and a fresh way of thinking. And it seems to be spreading to other parts of IBM. "At every level, IBM people are feeling a lot freer," says one ex-IBM who remains close to the company. "It used to take months for them to return my phone calls. Now, they seem to be able to turn on a dime."

Turning on a dime and turning a profit, of course, are entirely different propositions. IBM still has a long way to go in cutting costs and chasing new markets. But if nothing else, the December reorganization finally has injected some new life into the mammoth computer maker. "There used to be a lot of naysayers," says one Silicon Valley veteran who has worked closely with IBM for many years. "Now they're gone. IBM knows how to get down to business." That might eventually convince the skeptics that this time the turnaround could actually happen.

By John W. Verty in New York, with bureau reports

"OUTSTANDING"*

In this uncommonly sensible book, Frances Cairncross, Environment Editor of *The Economist*, chronicles how industries worldwide are changing the way they produce goods to meet the growing demands of a "green" economy.



"[COSTING THE EARTH] is a landmark piece of research and common sense. It offers solid, workable recommendations, an exception in this field. I hope it is widely read by all who care about real environmental solutions."

—Richard J. Mahoney, Chairman and CEO, Monsanto Company

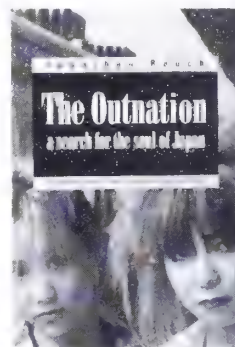
"... an outstanding book." —Gus Speth, President, World Resources Institute

340 pages \$24.95 ISBN 0-87584-315-8

"POWERFUL"*

A perceptive and honest exploration of Japan and its people, *THE OUTNATION* provides a much-needed alternative to the Japan-bashers on the one side and the Japan-apologists on the other. Anyone interested in the real Japan—whether to compete, cooperate, emulate, or simply understand—will profit from this extraordinary book.

"*THE OUTNATION is that rare thing—a charming, literate, and insightful work. Rauch's hypothesis that the Japanese political system is actually designed to be tempered by foreign pressure is both original and powerful." —Michael Lewis, author of *THE MONEY CULTURE*



182 pages \$18.95 ISBN 0-87584-320-4

Available at better bookstores, or call Harvard Business School Press at 1-800-545-7685.



HARVARD BUSINESS SCHOOL PRESS

405 OF THE FORTUNE 500[®] FICHE FOR SAVINGS WITH ANACOMP.

The more successful the company, the more information it creates. So when it comes time to store and retrieve this valuable information, more than 80% of the FORTUNE 500 rely on Anacomp and micrographics for a solution that lands them major savings.

JUST WHAT IS FICHE?

Each Anacomp fiche is a 4"x 6" sheet of microfilm that holds up to 700 pages of information. In most cases, fiche can be retrieved and used more quickly than competing media such as magnetic tape and optical disc. Most important, savings in the cost of paper, storage space, mailing costs, and manpower make fiche far and away the most cost-effective way to store and retrieve data.

As a cost-effective alternative to paper-based information management systems, Anacomp's micrographics is unsurpassed. Here are some specific examples of savings netted by Anacomp customers:

-  An 80% savings on the cost of labor
-  A 99% savings on the cost of mailing
-  A 90% savings on the cost of materials
-  A 99% savings on the cost of storage.

When we are invited to "Anacomp your company," we do a thorough audit of the way your business manages its information. Without exception, we can provide precise cost savings in real dollars over specific time frames.

Such dramatic savings, especially in today's business environment, have helped Anacomp become a member of the FORTUNE 500.

Let us "Anacomp your company." To find out how, contact P. Lang Lowrey, SVP, Anacomp, Inc., 3060 Peachtree Road, N.W., Atlanta, GA 30305, or call (404)262-2667.

anacomp
The Image Of The Future



QUICK, NAME FIVE TAIWANESE PC MAKERS

Despite their efforts to produce machines with their own brands, most just make goods for others



WITH MARGINS RAZOR THIN, TWINHEAD'S CHEN SAYS, "OUR PRICES CAN'T DROP ANY FURTHER"

Taiwan's Tatung Corp. saw the handwriting on the wall a few years ago. Building PCs and peripherals for companies such as IBM and Toshiba to sell under their brand names was a losing proposition: Most of the profits went to the guy whose name was on the box—not to the guy who built it.

Tatung, the country's No. 1 computer maker, wasn't alone. By the late 1980s, most of Taiwan's leading computer makers had concluded that the only way to really make money—and achieve prominence in world computer markets—was to build their own PCs, workstations, and notebook computers, and sell them in the West under their own brand names.

That most Americans have never heard of Tatung—or Mitac International or First International or TECO Information Systems—proves how poor the results have been. Grossly underestimating what it would take to establish brand names in the crowded U.S. market, Taiwan's computer makers have been pushed back into their behind-the-scenes role. And because of severe price cutting among their customers, many are finding it difficult merely to survive at the old game.

Even Acer Inc., the Taiwanese computer maker with the highest profile in the U.S., has grabbed less than 1% of the American market and recently reported a \$30 million loss from U.S. operations. "Taiwanese PCs have had zero impact in the U.S. as far as name brands go," says Andy Bose, vice-president of market researcher Link Resources Corp. in New York.

Acer says it has no intention of giving up its ambitions for the U.S.—and the world—and has earmarked \$20 million to promote its name this year (box). But Taiwan's other clone makers are rethinking their strategies and wondering if they'll ever make it in the U.S. under their own names.

What went wrong? Chalk it up to naivete. Five years ago, when the world personal-computer market was booming, cloners such as Acer, Mitac, and Tatung were racking up healthy profits and

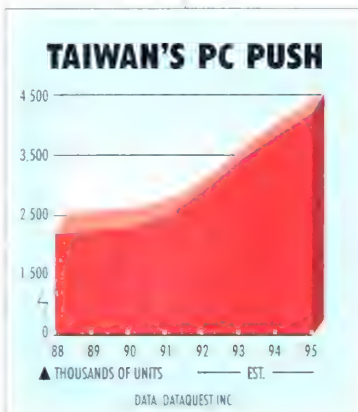
were in an expansive mood. They no longer wanted to be seen simply as clever ripoff artists—despite a widespread industry in counterfeit software that is still thriving (page 130). So they started snapping up U.S. distributors and Silicon Valley design firms. Back home they joined government-sponsored research projects. Led by Chinese-American veterans of such behemoths as IBM, Xerox, Wang, and AT&T, young engineers set out to develop more sophisticated computers.

One consortium began designing workstations based on Sun Microsystems Inc.'s Sparc microchip. But it broke up after Intel Corp. and Microsoft Corp.—suppliers of key technology to clone makers—persuaded companies such as Acer to back off. Some Taiwanese companies went on to build workstations, but sales have been slow. Another group collaborated on a notebook PC, but the process was so slow that by the time it was ready for manufacturing, the design was outdated. The bottom line, says Bill Higgs, an analyst at market researcher InfoCorp: "Taiwan is still known as a technology follower rather than a technology leader."

ROCK BOTTOM. So most of the Taiwanese PC makers are scrambling back into the private-label business they hoped to escape. The good news: There's plenty of business. Shipments of PCs from Taiwan are expected to jump 17% this year, to 2.9 million units (chart). And more than ever, they're built under private-label deals. Last year, nearly 49% of the 2.5 million computers Taiwan exported

were built under contract to foreign companies, compared with 33% in 1990, according to Taiwan's Institute for Information Industry.

"I no longer believe brand names will be so important," says Mitac President Ho Chir-shiung. Mitac, which has had moderate success selling its own brand in Europe, is nowhere in the U.S. Now, it's concentrating



new notebooks, PCs, and pen-based products that others will sell. Similarly, Tung is happy to return to the private-label business. Its workstation and notebook PC lines dragged down earnings in 1990. But it's now bouncing back with a 100 million order from Packard Bell Electronics Inc. for 700,000 PCs and 6,000 color monitors.

With prices dropping as much as 40% annually, U.S. and Japanese manufacturers are turning to Taiwanese subcontractors, who are willing to live on 10% gross margins. That's why, overnight, Taiwan has become a leading supplier of notebook computers. In 1991, a year after shipping their first notebooks, Taiwanese manufacturers were providing 70% of the world's output. Companies such as Tandy, Dell Computer, and NEC now have notebook PCs built in Taiwan. The bad news: Despite all the orders, prices are still dropping, and profits in Taiwan are precariously slim. Even notebook producers, whose factories are running flat out, are suffering. "Our prices won't drop any further," says President Charles Chen of Twinhead, which makes 1,000 notebooks a year. "We've already hit bottom."

FLYING LIKE FLIES. Industry executives are understandably anxious about the future. While only about 10% of the cost of building a PC is direct labor, workers in Taiwan have won 40% wage increases in the last three years. With customers demanding ever lower prices, the inevitable shakeout has begun: The Taipei Computer Assn.—which consists of 100 companies, including makers of monitors, circuit boards, and other components—says it is losing about 50 members a month to bankruptcy. By year's end, Mitac's Ho predicts, the number of major PC makers will shrink from a flock of 400 in 1991 to a few dozen.

Now, some companies are giving up on their PC dreams altogether, or at least postponing them. Rather than build complete machines, many are focusing on building peripherals and components. East International Corp., for example, is concentrating on motherboards, the circuit boards used in PCs. And Xerox Information Systems, which has been stymied in its attempts to sell PCs, says it will simply stick with monitors for a while longer. "Right now, we're groping in the dark," concedes Herman H. Jr., vice-president for marketing and research and development. "We just want to get through the year."

His hope—one that is shared by many Taiwanese computer executives—is to survive the shakeout. If they can, in a few years, they'll try for the big time again.

By Pete Engardio, with Bruce Einhorn in Taipei and Sunita Wadekar Bhargava in New York.

ACER IS STILL SEARCHING FOR THE PASSWORD TO THE U.S.

Stan Shih likes to talk about his *go* strategy for conquest in business. Rather than lunge for quick victory, a master player of the Oriental board game methodically surrounds his opponent before moving in for the kill. Since 1984, Shih has been using this patient tactic to move Acer Inc. into the U.S. computer market.

The first step was to build up Acer's own research and development capability. Then he expanded the product line by buying two Silicon Valley computer makers. He also invested heavily to recruit U.S. distributors and make the Acer name familiar to consumers. By this year, Acer was to have been ready for its big assault. It would storm the U.S. market with a \$500 PC and an ad blitz. Shih's goal: To make the Taiwan-based Acer one of the world's top five computer makers by 1995.

The *go* strategy hasn't gone as Shih had hoped. Last year, heavy losses in Acer America Corp. led to the parent company's first loss in 15 years—\$22 million on sales of \$472 million. Leonard Liu, a 20-year IBM veteran and Acer's president for American operations, quit on Apr. 22, and Shih assumed his responsibilities.

Shih's first mistake was investing in the wrong Silicon Valley companies. In 1987, he paid \$6 million for

Counterpoint, a startup that built a powerful minicomputer using multiple microprocessors. But Counterpoint was no match for the likes of Digital Equipment Corp. and failed two years later. In 1990, Shih doled out \$94 million for Altos Computer Systems Inc. A microcomputer pioneer, Altos had thousands of customers and an extensive network of distributors. But it, too, was selling minicomputer-like setups, and sales were evaporating.

'THE TERMINATOR.' But mismanagement, Acer executives say, caused the real damage. On top of poor inventory control and an unappealing product mix, slow shipments of finished PCs

from Taiwan caused bottlenecks at the PC assembly plant in San Jose, Calif.

Last year, the company began slashing Acer America staff by 10%, to about 600, and streamlining supply lines. It now plans to send parts, rather than finished PCs, to San Jose. That will make it easier to change configurations and cut prices quickly.

The \$500 PC, which Acer nicknamed "the Terminator," has been dropped. Acer couldn't get the price down that low, says Acer PC System Business President Johnny Shih—no relation to the founder. But last August, the company launched the low-cost Acros line for mass-merchandise chains and computer superstores. The cheapest model,

based on Intel Corp.'s 80386SX chip, sells for about \$800, and Acer expects Acros sales to hit \$100 million the first year.

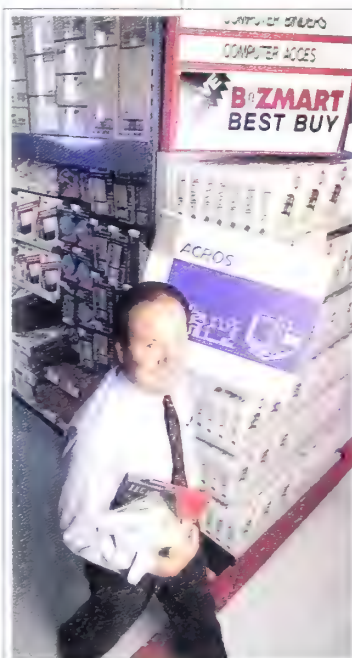
"The revenues are huge," says Peter A. Janssen, Acer America's marketing vice-president. "The problem is profitability."

ROUGH TERRAIN. Shih says the troubles in the U.S. weren't unexpected, given the recession and price wars. Acer, he notes, made money everywhere else. "We can compete anywhere in terms of product and price," he says. But the U.S. "is totally unfamiliar." He concedes, too, that he underestimated the investment needed to

penetrate the U.S. market.

But he's not giving up. Acer America is boosting its service staff and has started a telemarketing operation. Acer computers were recently picked for the ComputerLand Corp. chain, and Shih expects a 40% rise in U.S. sales, to \$280 million—and breakeven—in 1992. "We're medal winners in South America, the Middle East, and Southeast Asia," he says. "But we haven't won the U.S. Open yet. We're not used to that game." So far, at least, the patient *go* strategy hasn't worked.

By Pete Engardio in Taipei, with Kathy Rebello in San Francisco and Bruce Einhorn in Taipei



JANSSEN: "REVENUES ARE HUGE. THE PROBLEM IS PROFITABILITY"

FAKE WINDOWS, ERSATZ DOS, ANGRY UNCLE SAM

Taiwan's bold pirates are finally incurring the wrath of Washington

For months, the unlikely focus of software giant Microsoft Corp.'s wrath was an apartment building in a grim working-class suburb of Taipei. From there, a group of Taiwanese allegedly masterminded one of the largest and most sophisticated software piracy rings ever arrested. Months after a three-month investigation culminated in January, when local police stormed the building and seized Fong Shu-gwong and 5,000 counterfeit packages of Microsoft's Windows and MS-DOS programs stacked throughout his apartment—including in the shower.

Fed up after hearing of such cases for years, U.S. Trade Representative Carla A. Hills acted on Apr. 29. She placed Taiwan on her Special 301 Priority Country list, which means that unless Taiwan cleans up its act, it may be subject to strong trade sanctions. Taiwan is simply "a center for copyright piracy," Hills declared in a statement. Between pirated software, books, records, and videos, Taiwanese ripoff artists robbed U.S. businesses of \$370 million in sales last year, estimates the International Intellectual Property Alliance.

'NO WORSE.' But Taiwan's bustling computer industry is drawing the most fire. An astounding 90% of all U.S. software sold in the country is counterfeit, estimates the Business Software Alliance, a trade group (table). Although the industry has made some progress in the past two years, it still has a long way to go to break into the industry mainstream (page 128). There are hundreds of shoe-string operations assembling PCs. And apparently many of them simply load

disks before sealing the boxes for export. Suspecting as much, U.S. officials had demanded in April to inspect all computers leaving Taipei. When the Taiwanese government balked, Hills retaliated with her Special 301 ruling. Now, Taipei has a year or so to clamp down on the pirates. If it doesn't, the U.S. could impose high tariffs on Taiwanese imports, most likely its PCs.

The Taiwanese complain that the

move was unfair. Huang Yi-feng, director of legal services for the Taipei Computer Assn. claims that only about 5% of the PCs that Taiwan ships to the U.S. contain counterfeit software. "We're no worse than any other country," says Huang.

Microsoft and other U.S. software makers disagree. They were stunned



MICROSOFT'S CURTIS AND HOLOGRAMS: ON THE RIGHT IS THE ORIGINAL, LEFT IS THE REMARKABLY HIGH-QUALITY PHONY

by the sophistication and scope of the forgery. After nabbing Fong, investigators were led to production sites in Taiwan, Hong Kong, and China. They found flawless copies of manuals, diskettes, and packaging, including the metallic hologram stickers meant to foil copycats. "The quality of the counterfeit is remarkably high," says David D. Curtis, Microsoft's associate general counsel. The company claims that the Chinese government-owned research institute in the special economic zone of Shenzhen near Hong Kong. It had already filled orders for 450,000 holograms and had orders for 3 million more. That repre-

sents about \$150 million in lost revenue to Microsoft, Curtis estimates.

Software makers aren't the only businesses that say they are victims of Taiwan's lax enforcement of copyright protection. In addition to record companies and film studios, Nintendo of America claims that more than 40 million pirated video games were sold last year, many containing program chips forged by Taiwan's United Microelectronics Corp. "It is incontestable," says Lynn E. Hvalso, Nintendo of America's general counsel. UMC's Chairman Robert Tsau denies it.

OWNING UP. Still, Taiwanese officials say they've made progress. A decade ago, stores blatantly copied and sold U.S. books. "Before, we didn't care, but now we are actively going about changing things," says Wu Hueh-meei, secretary general of the Bureau of Standards. Her office helped prepare a set of new intellectual property laws, part of an effort to bring Taipei in line with international standards.

But the bills have languished. Taiwan's legislators wrangle over constitutional reform and other issues.

Pressure for reform is building from some business leaders. "We need to get rid of this small number of counterfeiters," says Kenneth Chiang of Loung Hwa Electronics, which exports \$90 million worth of circuit boards to the U.S. annually. "They affect the image of the whole Taiwanese industry."

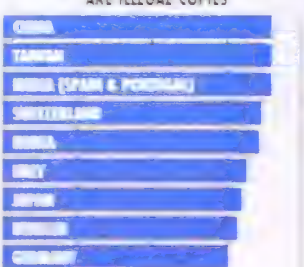
As Taiwan prepares for new talks with the U.S. this month, many here hope that retaliatory U.S. action can be averted. Microsoft and other software makers aren't waiting, though. In addition to the raid on Fong, the company filed a lawsuit in April against B

Computer Co., a Taipei company accused of copying Windows and MS-DOS. At Microsoft is particularly eager to track down the party who ordered 1 million Microsoft holograms from the factory in Shenzhen. "We never found the manufacturer," says Microsoft attorney A. Parlour. "But we will."

E. Paul Edwards Taipei, with Dori Jones

THE TOP PIRATES

SALES OF U.S. SOFTWARE PACKAGES THAT ARE ILLEGAL COPIES



NOTE: INCLUDES ONLY COUNTRIES RESPONSIBLE FOR MORE THAN \$100 MILLION WORTH OF SOFTWARE PIRACY
DATA SOURCE: SOFTWARE ALLIANCE

STUPENDOUS! COLOSSAL! ANYWAY, THE MARKETING IS

Hollywood has elaborate new schemes to sell its summer flicks

Ads for Choice Hotels International Inc. have often featured such real-life celebrities as former House Speaker Thomas P. "Tip" O'Neill popping out of a suitcase. But this summer, Choice has tied up with *Batman Returns*, the Warner Bros. sequel to the 89 extravaganza. So the Silver Spring (Md.) hotel group has produced tie-in commercials promoting its "Kids Stay Free" deals. One spot features pen-pals—the stubby-winged progeny of Batman's enemy—popping out of a vase. And that's not all, bat fans. The day before opening night, Choice will also host kids' Batman parties at most of its 200 U.S. locations.

The Summer of Hype is almost upon, and this year, movie-marketing execs are practicing their craft under a lot more than the usual pressure. First, many studios are cutting back on marketing budgets or expecting a lot more for what they spend.

Even movies with big ad budgets are trying to squeeze more from their marketing. Warner is spending \$10 million on ads for *Batman Returns*, more than 70% more than it did on *Batman*, but the producers of *Batman Returns* are counting on an additional \$60 million in cross-promotions—with nearly all of it from participating merchants. McDonald's

corp., for example, will give away discount coupons good for *Batman* merchandise at J.C. Penney's.

OTTY RECORD. Budget pressures are part of the problem. Hollywood generates as much as 40% of its annual box-office take between Memorial Day weekend and Labor Day. But many of this season's hoped-for hits—*Batman Returns*, *Honey, I Blew Up the Kid*, *That Weapon 3*, and *Alien 3*—are sevens, which have a spotty record of duplicating their originals' success. And many of these movies open between mid-

May and mid-June, earlier than usual. Standing out in this crowd will be tough.

More important, no one wants a sequel of last summer, a box-office bomb. True, two hits, *Terminator 2: Judgment Day* and *Robin Hood*, picked up \$370 million in ticket revenue. But the blockbusters didn't perform their usual job of luring viewers back to see lesser movies.

Hard times hurt, too. "When people don't have as much money, they get pickier, and last year, they just didn't want to see anything but the big pictures," says John Krier, president of Exhibitor Relations Co., which publishes a newsletter for movie-theater owners. Last year the number of movie tickets sold dropped 20% from 1990. Says Tom Sherak, executive vice-president of Twentieth Century-Fox Film Corp.: "Are we worried? We'd have to be foolish not to be."

Hence, the Dream Factory's need for better marketing, especially since traditional advertising alone won't do. "Now, we can't throw a ton of money at television and get results," says Robert Levin, president of marketing for Walt Disney Studios. Since 1987, when more than half of U.S. households had videocassette recorders

and cable television, the audience for movie marketers has been too diffuse to reach with network TV ads only. So ingenious plays are the order of the day.

BALLPARK PRANKS. Studios are branching far beyond the toymakers and fast-food chains they've traditionally teamed up with. Columbia Pictures and Major League Baseball will probably soon announce a deal to promote *A League of Their Own*, about a women's baseball league during World War II. The plan is to let Columbia run trailers of the film on more than a dozen giant

TV-style scoreboards nationwide. And the movie's stars—Madonna, Tom Hanks, and Geena Davis—could be throwing out the first ball at some games.

Then there's cable TV. Since a recent one-hour MTV special helped make a blockbuster out of Paramount's kids-oriented *Wayne's World*, other studios have scrambled to produce their own cable offerings. Columbia is planning an MTV special on the making of the soundtrack for its upcoming *Mo' Money*, starring Damon Wayans. Fox has a special for Home Box Office on the gruesome special effects of *Alien 3*. Warner is teaming up with the relatively small Black Entertainment Television channel on a special promoting *A Class Act*, a comedy featuring rap stars Kid 'N' Play.

Theater-chain operators, who have glutted the market with thousands of new screens, are also stepping up their marketing. To attract the MTV crowd, Toronto-based Cineplex Odeon Corp. is experimenting with screening rock videos before many of its showings. This summer, Cineplex employees will also hand out hundreds of thousands of trailer-jammed videocassettes to patrons, hoping they will view them at home and return soon. And AMC Entertainment Inc., a Kansas City (Mo.) theater chain, has moved to counter grumbling about hefty ticket prices. AMC's schedule of early-evening showings now offers tickets at half price.

Hollywood is counting on such marketing, and on the cyclical swing of its business, to banish its doldrums. After previous box-office slumps, audiences have flocked back on the strength of a *Raiders of the Lost Ark* or a *Batman*. Maybe this summer's unexpected hit will be *The Return of the Viewer*.

By Ronald Grover in Los Angeles

A LEAGUE OF THEIR OWN

Columbia's film on women's baseball seeks plugs in ballparks and \$20 million in promotions with Baskin-Robbins and Thomas J. Lipton

FAR AND AWAY

Universal's epic gets sneak previews nationwide, heavy advertising, and plenty of heart-throb magazine covers for star Tom Cruise

BATMAN RETURNS

The Warner Bros. sequel commands some \$60 million in tie-ins with Coca-Cola, McDonald's, J.C. Penney, and Nickelodeon. Plus, Choice Hotels uses bat themes in its promotions

PINOCCHIO

For this reissue, Walt Disney has some \$30 million worth of cross-promotions with Burger King, Mattel, and Kid Cuisine

HYPING THE NEW MOVIES



DATA: COMPANY REPORTS, BW

TURNING THE CORNER

IN OUR SURVEY OF 900 COMPANIES, PROFITS WERE UP 7% IN THE FIRST QUARTER

Down at the bottom line, things are looking up for Corporate America. But even with a soaring stock market, encouraging profits, and an apparent return of consumer confidence, you won't find executives exulting just yet. A lot of them made that mistake in the euphoria that followed the gulf war, only to watch the country fall deeper into recession. This time, says Stephen S. Roach, senior economist at Morgan Stanley & Co., "we're exercising caution."

But there are plenty of signs that the economy is preparing to emerge from its torpor, albeit slowly. First-quarter retail sales were up 12% from last year's fourth quarter. Gross domestic product grew at a 2% annual rate in the first quarter, compared with 0.4% in 1991's final period. And first-quarter profits before extraordinary items for the nearly 900 companies on BUSINESS WEEK's Scoreboard were 7% higher than a year ago. It all adds up to "a moderate economic recovery in 1992, but not a dramatic expansion in earnings," says Thomas Doerflinger, a PaineWebber Inc. investment strategist.

BANKING REBOUND. That moderate recovery wasn't limited to just a few industries. In the first quarter, three times more sectors reported dollar gains in profitability than reported dollar losses. Notable gainers: the automotive, telephone, and financial-services industries, and Eastern banks. Among the biggest losers were the fuel, retailing, and chemical industries.

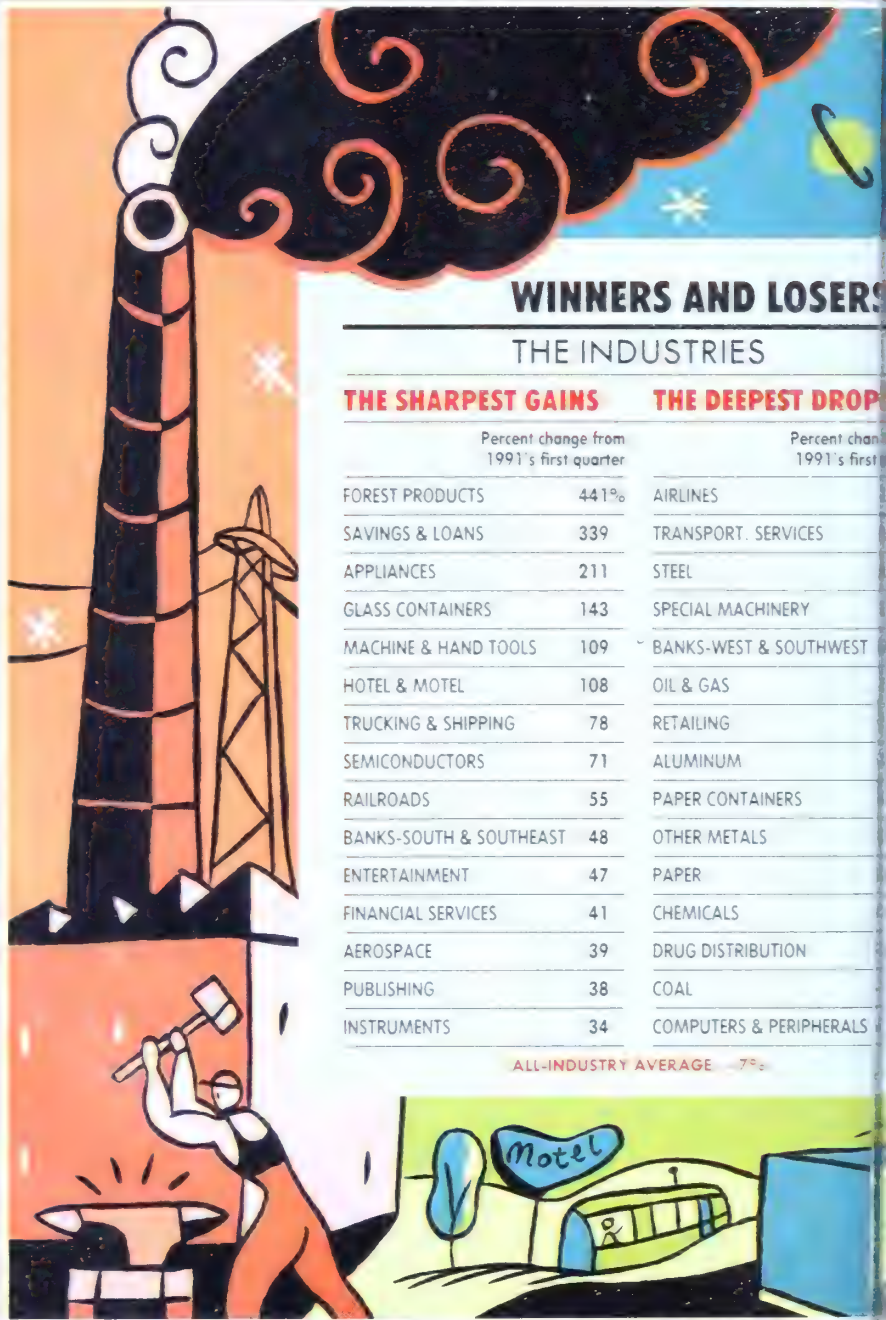
The banking industry checked in with some tremendous turnarounds, though as a whole it gained only 8% over 1991's first quarter. Profits soared at many of the nation's bigger banks, notably Citicorp, Bankers Trust, and the ever-acquisitive Banc One. They were helped by lower short-term interest rates and declining problem assets. Although banks in the West and Southwest stayed sluggish because of California's bleak economy and worsening real estate problems, their peers in the South and Southeast recorded a 48% gain.

Other industries with dramatic earnings turnarounds were appliances/home furnishings and forest products. Both got a boost from the resurgent building

industry. Forest products also benefited from what one analyst calls "the spotted owl effect"—rising prices stemming from environmental restrictions on supply. The publishing and broadcasting industries got some help from a long-awaited increase in ad revenues.

The Big Three carmakers can thank

their nonauto operations and strenuous cost-cutting moves for some badly needed profits after a string of losing quarters. General Motors Corp. reported earnings of \$179.3 million after six quarters of losses totaling nearly \$8 billion. Likewise, Ford Motor Co. drove home with \$337.9 million, its first profit since



WINNERS AND LOSERS

THE INDUSTRIES

THE SHARPEST GAINS

THE DEEPEST DROPS

	Percent change from 1991's first quarter		Percent change from 1991's first quarter
FOREST PRODUCTS	441%	AIRLINES	
SAVINGS & LOANS	339	TRANSPORT SERVICES	
APPLIANCES	211	STEEL	
GLASS CONTAINERS	143	SPECIAL MACHINERY	
MACHINE & HAND TOOLS	109	BANKS-WEST & SOUTHWEST	
HOTEL & MOTEL	108	OIL & GAS	
TRUCKING & SHIPPING	78	RETAILING	
SEMICONDUCTORS	71	ALUMINUM	
RAILROADS	55	PAPER CONTAINERS	
BANKS-SOUTH & SOUTHEAST	48	OTHER METALS	
ENTERTAINMENT	47	PAPER	
FINANCIAL SERVICES	41	CHEMICALS	
AEROSPACE	39	DRUG DISTRIBUTION	
PUBLISHING	38	COAL	
INSTRUMENTS	34	COMPUTERS & PERIPHERALS	

ALL-INDUSTRY AVERAGE 7%

IN INCH AT A TIME

1991'S FIRST QUARTER

the third quarter of 1990. Chrysler Corp. is the only loser in the bunch, partly because of startup costs for its Jeep and Cherokee. Still, excluding accounting charges, its \$231 million first-quarter loss was \$110 million better than last-quarter 1991. For many fuel companies, the gulf

war was a boon, as skyrocketing oil prices sent profits out of sight. But now it's payback time: Eliminate the oil group's 57% earnings plunge from the Corporate Scoreboard, and the first quarter's increase in profits would have been 19% instead of 7%. Exxon Corp. made \$1.3 billion, down from \$2.2 billion

last year. Analysts blame weak worldwide demand for gasoline and petroleum products. Texaco had a 52% decline, Occidental Petroleum posted a 76% drop, and Mobil fell a painful 82%.

If refiners think it has been hard selling gasoline, they should imagine trying to pry open shoppers' wallets for fashion, toys, and other nonessentials. Retailers' profits plunged 53% from a year ago as many department stores and specialty chains slid into the red. Four of the 15 biggest dollar losers were from this group, including Federated Department Stores and R.H. Macy & Co., suggesting that rising consumer confidence had yet to translate into bigger spending.

BARGAIN HUNTING. That left the door wide open for discounters such as Kmart Corp. and Wal-Mart Stores Inc., which earned \$479 million and \$602 million, respectively. "The motivating issue from now on will be price, not fashion and prestige," says Alan Millstein, a New York consultant, who expects further profit declines at pricey department-store chains in the months ahead.

Low prices haven't worked out so well for the airlines. Many carriers tried to lure travelers with cheap seats, but the latest price war pummeled profits—and didn't even draw many fliers. Delta Air Lines Inc. had the biggest loss, \$151.6 million, thanks in part to the costs it incurred absorbing Pan Am Corp.'s transatlantic routes last year. Some analysts, however, expect airlines to take off in the next three quarters with more consolidation among the top players and a recovery in demand. The turnaround may stall in the second quarter because of costs associated with consolidation, "but there will be a bigger payoff in the long term as the survivors get a bigger piece of the pie," says Glenn Engel, vice-president at Goldman, Sachs & Co.

The twists and turns of the economy had a considerable impact on the rankings of America's most profitable companies. Mobil, Dow Chemical, and Chevron disappeared from the first quarter's most-profitable list, to be replaced by Kmart, Boeing, and Eli Lilly. Big Blue finally had a bit of good news, too. After tumbling from the top 25 earners' list for 1991, IBM hopped back into the top

1991'S FIRST QUARTER PROFITS

THE COMPANIES

MADE THE MOST		WHO LOST THE MOST	
	Millions of dollars		Millions of dollars
	\$1,350	FEDERATED DEPT. STORES	\$967
ORRIS	1,099	R. H. MACY	672
ELECTRIC	1,058	SECURITY PACIFIC	496
	883	DIGITAL EQUIPMENT	294
RT STORES	602	CHRYSLER	231
	595	FEDERAL EXPRESS	193
	569	DELTA AIR LINES	152
MYERS SQUIBB	547	CATERPILLAR	132
	482	WOOLWORTH	128
	479	McCAW CELLULAR	119
& GAMBLE	474	VARITY	115
& JOHNSON	464	GLENFED	107
H	461	CARTER HAWLEY HALE	102
	443	UAL	92
	441	PHILLIPS PETROLEUM	88

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.



Corporate Scoreboard

15, with net earnings of \$595 million, a 7% increase from last year's first quarter. Key factors: strong cost-cutting and consolidation of manufacturing and development.

Even so, few expect major growth in computers for the rest of this year under the continuing weight of weak demand and declining prices. In fact, analysts predict such industry leaders as

IBM, Compaq Computer, and Digital Equipment will keep losing market share to such clone-makers as Dell Computer. This low-cost producer of direct-mail computers posted a 79% profit in the first quarter.

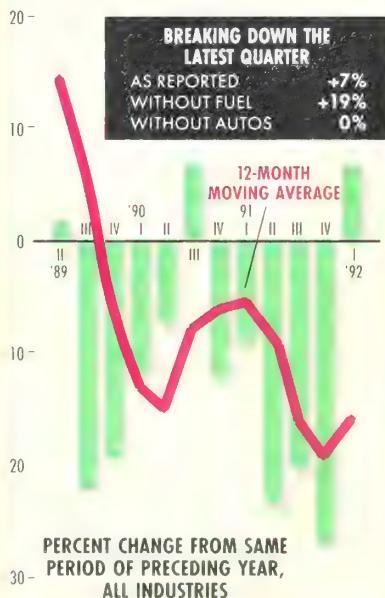
If the economy begins to pick up in earnest, such cost-conscious manufacturers should continue to thrive. Says Paul Getman, managing director of Regional

Financial Associates Inc., an economic forecasting firm in West Chester, Pa. "1991 was the year everyone wants to forget. Things will accelerate in 1992 as companies get leaner and meaner. Sounds nice, but don't expect any jubilation in the boardroom. This time, the celebrating won't start until the recovery is signed, sealed, and delivered."

By Sunita Wadekar Bhargava in New York

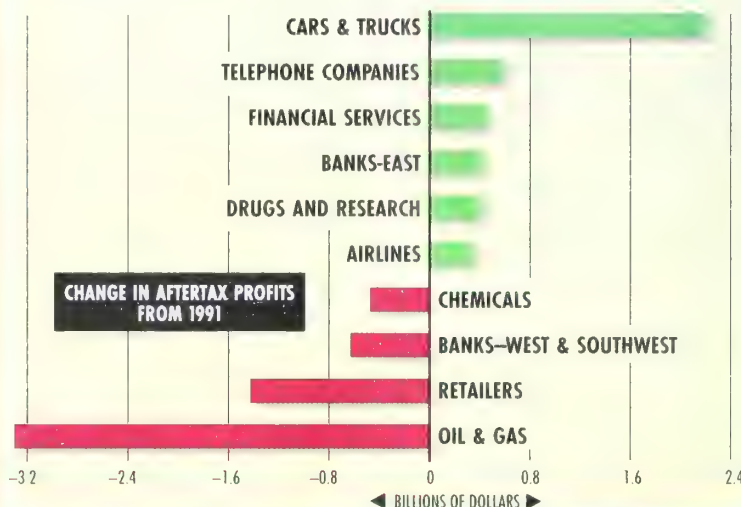
A SPOTLIGHT ON FIRST-QUARTER PROFITS

AFTERTAX PROFITS, QUARTER BY QUARTER



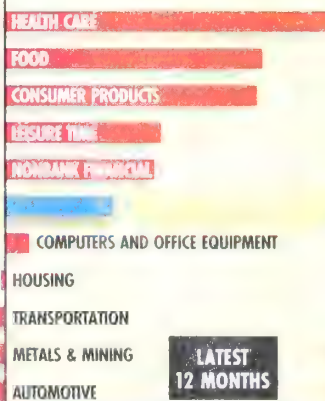
INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

Has the recovery begun for corporate profits? Well, most of the industries with big dollar changes posted gains. This is the first time that has happened since the third quarter of 1990.

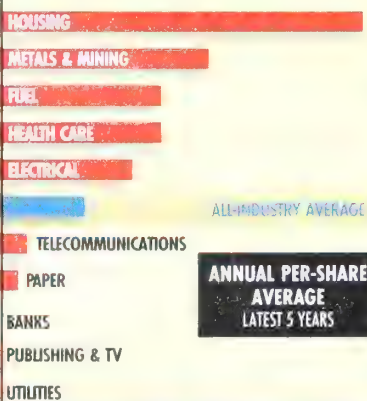


A LOOK AT PROFITS FROM THE INVESTOR'S PERSPECTIVE

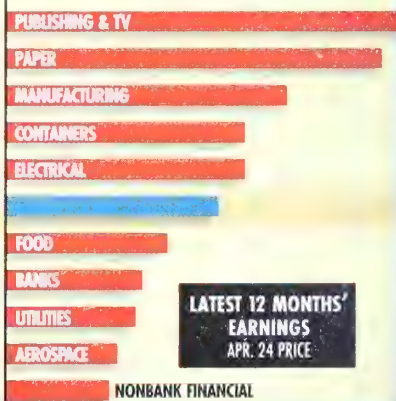
RETURN ON EQUITY



EARNINGS GROWTH



PRICE-EARNINGS RATIO



CORPORATE SCOREBOARD

FIRST QUARTER 1992

GLOSSARY

Sales: Includes all sales and other operating revenues. For banks, includes all operating revenues.

Profits: Net income before extraordinary items and discontinued operations. For banks, profits are net income after security gains or losses.

Margins: Net income before extraordinary items as percent of sales.

Return on invested capital: Ratio of net income before extraordinary items and

discontinued operations, plus minority interest and interest expenses adjusted by tax rate (all for most recent 12 months), to latest available total funds invested in company.

Return on common equity: Ratio of net available for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, retained earnings.

Price-earnings ratio: Based on Apr. 24 stock price and earnings for latest 12 months.

Growth in common equity: Annual percentage growth in common equity for latest 5-year period.

Growth in earnings per share: Annual percentage growth in earnings per share, including all common stock equivalents for latest 5-year period.

Market value: Latest available shares outstanding times stock price on Apr. 24, 1992.

Earnings per share: For latest 12 months; includes all common stock equivalents.

COMPANY	SALES		PROFITS		MARGINS		RETURN			5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4.24 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4.24	COMMON EQUITY %	EARNINGS PER SHARE %			
ALL-INDUSTRY COMPOSITE	945369.8	3	40815.1	7	4.3	4.1	7.0	8.8	25	6	9	3037044	1.59	

AEROSPACE

INDUSTRY COMPOSITE	26875.5	9	948.0	39	3.5	2.8	8.7	10.6	14	6	10	37532	3.16
Boeing	7967.0	31	441.0	43	5.5	5.1	18.0	21.0	9	11	25	15486	4.95
Boeing Corp (1)	461.0	6	2.0	NM	0.4	NM	11.8	17.2	12	-29	-2	440	1.12
General Dynamics	2118.0	-1	72.0	44	3.4	2.3	NM	20.0	7	6	-4	2735	9.44
Grumman	957.2**	9	31.6	40	3.3	2.6	9.1	11.0	6	6	14	653	3.15
Lockheed	2226.0	0	66.0	22	3.0	2.4	10.1	12.8	9	5	-16	2911	5.08
Martin Marietta	1371.5	-2	74.6	5	5.4	5.1	13.6	17.3	8	17	12	2631	6.37
McDonnell Douglas	4144.0	-2	52.0	-10	1.3	1.4	8.9	8.9	6	6	3	2208	9.09
Northrop	1300.5	4	47.2	45	3.6	2.6	20.3	23.4	5	4	41	1242	5.86
Boeing (5)	306.9	2	8.6	51	2.8	1.9	7.0	8.1	7	7	-46	267	2.13
Boeing (5)	383.4	-5	20.9	-12	5.5	5.9	11.4	15.0	15	3	29	1609	2.94
Boeing (5)	132.8**	18	8.0	6	6.0	6.7	11.9	14.3	19	16	12	580	1.79
Boeing (5)	341.2	11	15.2	31	4.5	3.8	10.7	17.4	5	NA	NA	310	3.07
Boeing (5)	5166.0**	8	109.0	171	2.1	0.8	NM	-31.4	NM	-2	NA	6461	-8.33

AUTOMOTIVE

INDUSTRY COMPOSITE	74183.0	15	456.8	NM	0.6	NM	-2.6	-8.1	NM	2	NA	70751	-2.94
CARS & TRUCKS GROUP COMPOSITE	66281.1	15	265.0	NM	0.4	NM	-3.3	-10.1	NM	2	NA	53694	-3.88
Chrysler	8190.0**	40	-231.0	NM	NM	NM	NM	-7.0	NM	2	NA	5408	-1.80
Ford Motor	24557.5	15	337.9	NM	1.4	NM	NM	-4.9	NM	9	NA	20903	-2.31
General Motors	32043.0**	10	179.3	NM	0.6	NM	NM	-14.9	NM	-3	NA	24606	-7.55
Isuzu International (2)	902.0	7	-32.0	NM	NM	NM	NM	-64.4	NM	-3	NA	783	-0.75
Jeep	588.7	23	10.8	NM	1.8	NM	10.4	5.4	36	8	-7	1996	1.64

ARTS & EQUIPMENT

INDUSTRY COMPOSITE	4724.9	12	88.6	NM	1.9	NM	3.4	3.8	50	0	NA	7837	0.72
Arvin Industries	459.4	20	4.2	NM	0.9	NM	6.1	5.0	24	6	-20	466	1.03
Boeing Engine	881.3	9	8.6	NM	1.0	NM	NM	-6.0	NM	-6	NA	965	-2.07
Boeing	1185.6**	13	14.4	586	1.2	0.2	NM	2.6	67	2	-25	1742	0.63
Boeing-Picher Industries (1)	134.2	-3	4.1	NM	3.0	NM	NM	NM	NM	NA	NA	25	-0.76
Boeing	949.0	16	33.0	NM	3.5	NM	8.0	9.5	24	-1	-7	2664	3.21
Boeing (4)	413.4	4	11.2	57	2.7	1.8	7.0	7.3	21	7	-7	1012	0.85
Boeing-Mogul	297.0	7	1.9	NM	0.6	NM	NM	-11.7	NM	-11	NA	400	-0.94
Boeing (A. O.)	247.9	24	5.9	NM	2.4	NM	4.2	2.9	29	NA	-26	245	1.05
Boeing Products (6)	157.2	17	5.4	NM	3.4	NM	4.3	5.4	54	0	NA	317	0.58

RE & RUBBER

INDUSTRY COMPOSITE	3176.9	12	103.2	NM	3.2	NM	8.3	11.6	21	1	-6	9220	3.45
Goodyear	129.5	4	16.6	27	12.8	10.5	26.5	28.0	22	13	14	1857	5.97
Goodyear Tire & Rubber	269.1	29	20.3	64	7.5	5.9	16.2	19.1	25	18	28	2152	2.11
Goodyear Tire & Rubber	2778.3	11	66.3	NM	2.4	NM	6.4	8.6	20	0	-8	5211	3.78

First quarter ended Feb. 29. (2) First quarter ended Jan. 31. (3) Second quarter ended Mar. 31. (4) Second quarter ended Feb. 29. (5) Second quarter ended Jan. 31. (6) Third quarter ended Mar. 31. (7) Third quarter ended Feb. 29. (8) Third quarter ended Jan. 31. (9) Fourth quarter ended Mar. 31. (10) Fourth quarter ended Feb. 29. (11) Fourth quarter ended Mar. 31. *Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues from some major subsidiaries are not included in consolidated sales; parent's share of earnings is included in profits. NA = not available. NM = not meaningful. Earnings per share are for latest 12 months, not necessarily for end of most recent year; they include all common stock equivalents but exclude extraordinary items.

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4/24 \$ MIL.	12 MONTHS EARNING PER SHARE
	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4/24	COMMON EQUITY %	EARNINGS PER SHARE %		
3 BANKS													
INDUSTRY COMPOSITE	52200.1	-8	3432.2	8	6.6	5.6	9.8	6.7	16	9	0	156229	1.96
(a) BANKS - EAST													
GROUP COMPOSITE	27630.7	-8	1761.2	32	6.4	4.5	10.6	6.5	13	5	-9	62664	2.46
Bank of Boston	1307.1	21	39.2	-59	3.0	9.0	NM	6.3	19	-2	NA	1655	1.18
Bank of New York	925.3	-21	80.0	NM	8.6	NM	10.5	9.3	12	23	-23	2884	3.33
Bankers Trust New York	1591.0	-14	175.0	9	11.0	8.7	37.7	22.3	7	-2	71	4760	7.92
Chase Manhattan	2877.0	-7	141.0	21	4.9	3.8	18.6	10.3	8	2	NA	3689	3.21
Chemical Banking	3231.0	-12	260.0	44	8.0	4.9	11.9	-1.8	NM	13	-54	6559	0.27
Citicorp	7998.0	-1	183.0	97	2.3	1.1	NM	-13.7	6	0	NA	6492	3.02
CoreStates Financial	522.9	-16	58.2	14	11.1	8.2	14.4	15.3	11	11	-3	2500	4.31
First Fidelity Bancorporation	631.3	-14	65.5	17	10.4	7.6	13.3	12.4	11	11	7	2497	3.31
Fleet Financial Group	1148.9	24	50.4	98	4.4	2.8	6.6	4.8	37	20	-19	2436	0.77
KeyCorp	552.5	9	57.2	47	10.3	7.7	15.3	14.8	12	15	8	2286	2.71
Mellon Bank	784.0	-2	86.0	26	11.0	8.5	16.6	15.1	8	4	-9	2039	4.77
Meridian Bancorp	270.2	-9	27.1	33	10.0	6.8	16.9	14.1	10	12	-5	1192	2.67
Midlantic	381.8	-29	-29.0	NM	NM	NM	NM	NA	NM	-5	NA	310	-14.52
MNC Financial	405.1	-55	1.1	NM	0.3	17.2	NM	-22.8	NM	11	NA	753	-2.64
Morgan (J. P.)	2444.0	-10	299.0	10	12.2	10.1	31.2	20.0	9	1	23	10306	5.74
PNC Financial	1058.7	-9	127.7	44	12.1	7.6	16.8	12.8	12	12	-13	5572	4.20
Republic New York	585.9	-14	60.4	10	10.3	8.1	11.6	13.5	10	10	8	2069	4.02
Shawmut National	566.5	-13	43.3	NM	7.6	NM	NM	-1.3	NM	2	NA	1171	-0.19
State Street Boston	349.5	-8	36.2	-37	10.4	15.2	NA	14.5	21	15	13	2494	3.13
(b) BANKS - MIDWEST													
GROUP COMPOSITE	8941.6	-3	946.2	29	10.6	7.9	15.4	12.7	13	13	28	38105	2.85
Banc One	1353.3	33	178.7	38	13.2	12.7	17.2	16.0	15	23	13	8376	3.09
Boatmen's Bancshares	390.9	-3	45.6	32	11.7	8.6	14.9	12.0	11	19	2	1737	4.27
Comerica	329.6	-7	43.3	22	13.1	10.0	16.2	15.5	12	15	16	1866	5.17
Continental Bank	520.0	-17	57.0	84	11.0	4.9	NA	-7.4	NM	9	NA	961	-1.53
First Bank System	422.2	-10	56.9	40	13.5	8.7	15.0	15.8	12	-4	0	2146	2.30
First Chicago	1086.4	-14	60.7	23	5.6	3.9	11.7	3.6	27	8	-23	2262	1.23
First of America Bank	394.8	11	39.7	38	10.1	8.1	12.4	14.4	9	23	3	1162	3.60
Firststar	300.0	-4	37.1	19	12.4	10.0	17.0	14.9	11	15	9	1517	4.47
Huntington Bancshares	298.3	-1	31.9	25	10.7	8.5	18.4	14.5	11	14	7	1348	2.01
Manufacturers National	264.3	-12	31.1	13	11.8	9.1	22.5	14.9	12	13	34	1517	3.90
Michigan National	255.2	-9	14.3	499	5.6	0.9	NA	8.2	12	11	-3	746	4.15
National City	597.7	-11	69.0	34	11.5	7.7	14.9	13.5	11	17	6	2543	3.83
NBD Bancorp	650.5	-6	78.6	13	12.1	10.0	17.1	14.4	11	12	10	3197	2.57
Northern Trust	310.2	-5	35.8	15	11.5	9.5	NA	18.1	16	15	14	1915	3.55
Norwest	1137.1	-2	122.4	30	10.8	8.1	15.2	18.4	12	15	9	4881	3.09
Society	631.0	-10	44.2	-15	7.0	7.4	20.1	15.1	13	14	9	1930	4.41
(c) BANKS - SOUTH & SOUTHEAST													
GROUP COMPOSITE	7093.2	-7	701.4	48	9.9	6.2	12.1	8.2	21	16	-3	31620	1.94
Barnett Banks	759.6	-10	43.6	138	5.7	2.2	NA	7.7	19	10	-16	2642	1.98
Crestar Financial	279.3	-9	13.7	15	4.9	3.9	13.6	4.4	25	9	-14	814	1.02
Dominion Bankshares	228.1	-13	-27.8	NM	NM	2.1	NM	-2.5	NM	10	-23	511	-0.37
First Union	1081.1	4	107.9	33	10.0	7.8	12.5	11.0	14	13	-1	4539	2.69
NationsBank	2731.0	-8	310.0	95	11.4	5.3	NA	5.2	36	34	-11	11129	1.34
Signet Banking	262.4	-23	22.1	246	8.4	1.9	NM	-1.4	NM	8	NA	963	-0.38
Southtrust	229.5	1	25.8	27	11.2	8.9	16.9	14.4	11	13	7	1042	2.22
SunTrust Banks	802.0	-6	100.1	12	12.5	10.4	17.0	15.0	12	11	9	4713	2.98
Wachovia	720.1	-11	106.1	26	14.7	10.4	NA	10.1	21	15	3	5269	2.92
(d) BANKS - WEST & SOUTHWEST													
GROUP COMPOSITE	8534.6	-16	23.3	-96	0.3	6.3	0.9	-1.6	26	11	1	23840	-0.82
Bancorp Hawaii	239.9	-7	30.6	16	12.8	10.2	20.6	16.2	11	20	15	1262	4.18
BankAmerica	2890.0	-7	303.0	7	10.5	9.1	13.4	15.8	10	20	18	10096	4.78
First City Bancorporation of Texas	179.1	-40	-73.8	NM	NM	NM	NM	NA	NM	NA	NA	19	-13.35
First Interstate Bancorp	1092.4	-20	60.6	2	5.5	4.4	NM	-16.2	NM	-3	NA	4259	-5.30
Security Pacific	1692.2	-30	-496.3	NM	NM	4.0	NM	-44.2	NA	6	NA	NA	-11.01
U. S. Bancorp	485.4	4	47.1	-5	9.7	9.8	13.8	13.8	12	16	14	2357	1.98
Union Bank	360.5	-14	13.7	-61	3.8	8.3	NA	7.0	11	12	-8	736	2.01
Valley National	259.1	-6	19.4	77	7.5	4.0	10.1	8.2	24	-5	-27	1030	2.05
Wells Fargo	1336.0	-12	119.0	-22	8.9	10.0	NA	-1.3	NM	10	-34	4082	-0.70
4 CHEMICALS													
INDUSTRY COMPOSITE	30674.3	-4	1523.1	-23	5.0	6.2	7.3	8.7	26	8	7	116570	1.65
Air Products & Chemicals (3)	793.3	5	73.3	11	9.2	8.7	9.4	13.4	20	12	83	5242	2.35
American Cyanamid	1378.6	5	114.8	10	8.3	8.0	13.4	14.2	15	9	0	5555	3.91
Arco Chemical	762.0	12	61.0	17	8.0	7.6	7.9	11.6	21	11	-27	4159	2.08
Betz Laboratories	175.7	8	20.1	10	11.4	11.2	20.1	27.1	22	3	17	1587	2.55
Cabot (3)	417.9	2	22.0	41	5.3	3.8	7.5	11.6	19	-9	-1	841	2.41
Dexter	243.2	3	8.9	29	3.7	3.0	0.3	-1.6	NM	4	NA	577	-0.2

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 424 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 424	COMMON EQUITY %	EARNINGS PER SHARE %		
					1ST QUARTER 1992 %	1ST QUARTER 1991 %							
Dow Chemical	4639.0**	-6	171.0	-70	3.7	11.7	7.3	5.6	31	13	6	16581	1.95
Du Pont	9185.0***	-5	482.0	-18	5.2	6.1	6.6	7.8	27	5	3	34233	1.91
Engelhard	630.0**	0	23.8	13	3.8	3.3	12.2	12.0	18	4	6	1603	2.02
Ethyl	681.6	4	63.2	19	9.3	8.1	10.5	17.8	15	4	5	3298	1.83
Ferro	272.6	4	12.9	350	4.7	1.1	4.8	5.0	76	-1	-35	858	0.59
Freeport-McMoRan	363.5	-11	5.5	-82	1.5	7.6	9.6	18.3	43	-13	22	2973	0.96
Guller (H. B.) (1)	218.8	8	6.0	65	2.8	1.8	12.6	13.7	22	9	4	665	3.25
Georgia Gulf	189.6	-19	13.0	-24	6.8	7.3	43.6	NM	15	NA	6	831	1.64
Goodrich (B. F.)	605.3	5	0.1	NM	0.0	NM	NM	-7.8	NM	10	NA	1391	-3.38
Grace (W. R.)	1325.9	-10	19.0	-41	1.4	2.2	8.1	10.2	16	9	9	3334	2.34
Great Lakes Chemical	344.5	8	53.0	37	15.4	12.1	21.2	19.1	25	30	36	4300	2.43
Hanna (M. A.)	296.9**	15	3.5	4	1.2	1.3	NM	-4.6	NM	17	NA	559	-0.77
Interco	744.0	-3	36.9	14	5.0	4.2	5.4	5.2	26	0	-23	2516	2.11
MC Fertilizer Group (6)	267.5	-7	38.5	107	14.4	6.5	9.3	15.2	10	13	NA	1057	5.06
Inspiration Resources	199.8**	7	-8.1	NM	NM	NM	11.0	10.8	18	-8	19	388	0.31
International Specialty Products	142.1	2	17.1	33	12.0	9.3	10.6	11.9	19	NA	NA	1124	0.58
Lucite	147.5	7	19.7	24	13.3	11.4	20.7	21.0	22	18	26	1637	2.09
Lyubrizol	417.0	11	44.1	25	10.6	9.4	15.9	16.7	17	6	17	2200	3.83
Lyondell Petrochemical	1028.0	-37	-13.0	NM	NM	6.1	17.2	150.7	18	-5	NA	2000	1.38
Morton International (6)	555.0	7	41.2	2	7.4	7.8	11.0	12.4	20	NA	8	2844	2.95
Nalco Chemical	326.4	22	33.0	6	10.1	11.7	15.3	23.9	19	4	17	2392	1.80
IL Industries	226.1	0	-4.4	NM	NM	NM	NM	NM	60	-41	NA	426	0.14
Nlin	614.2	9	23.6	NM	3.8	NM	8.2	11.0	16	-4	NA	1008	3.34
Quantum Chemical	631.3*	-15	-12.1	NM	NM	2.6	NM	NM	NM	NA	NA	385	-5.34
Ohm & Haas	714.4**	5	59.3	44	8.3	6.1	9.7	14.2	21	4	3	3689	2.69
Chulman (A.) (4)	172.5	-11	9.8	-1	5.7	5.1	15.4	16.3	22	19	22	911	1.42
Cotts (3)	150.5	3	9.3	90	6.2	3.3	13.5	NM	47	NA	NA	71	0.35
Inion Carbide	1187.0	-10	44.0	-21	3.7	4.2	NM	-6.6	NM	19	NA	3429	-1.16
Vellman	207.5	8	12.1	18	5.8	5.4	8.9	10.8	19	65	24	887	1.44
Vitco	420.3	6	18.9	13	4.5	4.2	9.8	12.1	14	6	0	1021	3.29

CONGLOMERATES

INDUSTRY COMPOSITE	38559.6	1	1740.2	9	4.5	4.2	10.6	10.5	22	3	11	111842	2.28
ico Standard (3)	1244.0**	6	25.2	25	2.0	1.7	9.8	11.5	19	11	5	1795	2.14
llied-Signal	2979.0	3	127.0	102	4.3	2.2	NM	-7.0	NM	-2	NA	8013	-1.55
oltec Industries	337.6	0	-2.7	NM	NM	NM	28.0	NM	NA	NA	NA	NA	NA
art Group (11)	330.8**	9	3.9	NM	1.2	0.0	4.7	2.3	22	6	-10	131	3.46
ial	741.3	-12	13.9	15	1.9	1.4	2.2	1.2	NM	-1	-24	1410	0.27
ggie International	298.5	-5	9.0	41	3.0	2.0	7.5	8.6	13	4	-3	447	1.87
qua Industries	276.3	31	-1.8	NM	NM	NM	NM	-16.1	NM	-1	NA	221	-2.30
eneral Cinema (2)	883.0**	0	27.7	NM	3.1	NM	NM	-56.9	NM	10	NA	1673	-3.39
eneral Electric	13500.0**	2	1058.0	6	7.8	7.5	19.6	20.7	15	8	17	65565	5.19
eneral Host (11)	142.3	4	0.7	-81	0.5	2.8	7.1	5.5	17	-9	NA	148	0.48
T	5100.0	2	163.0	-29	3.2	4.6	9.4	8.5	11	2	11	7266	5.87
gden	414.2	16	13.6	13	3.3	3.4	6.2	12.3	16	4	5	930	1.37
all (5)	166.3	2	18.9	13	11.4	10.2	15.1	15.8	29	17	12	2407	0.93
emark International	678.4	4	20.5	130	3.0	1.4	12.6	13.6	14	7	1	1541	3.57
ockwell International (3)	2758.0	-8	99.0	-36	3.6	5.2	10.5	12.4	11	7	4	5464	2.30
ledyne	718.5	-12	11.8	-23	1.6	1.9	NM	-6.4	NM	-26	NA	1184	-0.53
nneco	3272.0	-2	33.0	NM	1.0	0.0	NM	-23.8	NM	-7	NA	5449	-5.40
atron	1995.1	5	76.0	14	3.8	3.5	8.4	10.6	10	NA	3	2927	3.52
W	2031.0	6	41.0	17	2.0	1.8	NM	-8.0	NM	8	NA	3190	-2.20
alhi	195.6	13	-2.7	NM	NM	NM	10.5	10.7	15	24	-25	626	0.36
hitman	497.8	3	5.3	NM	1.1	NM	10.7	18.9	17	-27	-22	1456	0.82

CONSUMER PRODUCTS

INDUSTRY COMPOSITE	56647.4	7	3642.5	20	6.4	5.7	12.7	20.9	21	8	11	294466	2.16
PPAREL GROUP COMPOSITE	5773.4	11	296.7	6	5.1	5.4	13.1	17.7	17	12	17	21454	1.95
own Group (11)	433.7	-1	0.2	-97	0.1	1.8	5.8	5.0	27	-2	-7	428	0.92
ystal Brands	188.7	-9	-50.1	NM	NM	0.6	NM	-58.8	NM	3	NA	101	-9.15
uit of the Loom	423.3	21	36.1	127	8.5	4.6	13.0	19.1	20	35	26	2767	1.82
artmarx (1)	304.7	-4	-6.6	NM	NM	NM	NM	-15.2	NM	-4	NA	152	-1.94
strument Systems (3)	136.1	24	4.6	191	3.4	1.4	13.6	16.4	11	1	45	243	0.63
ellwood (8)	204.0	12	2.1	363	1.0	0.3	8.3	9.7	17	9	-14	340	1.72
slie Fay	210.5	-14	10.7	6	5.1	4.1	14.1	13.9	10	19	3	305	1.57
z Claiborne	566.9	13	62.8	3	11.1	12.2	NA	24.7	13	29	22	2887	2.63
ike (7)	867.0	8	82.5	17	9.5	8.8	31.6	26.5	16	28	50	4847	4.14
xford Industries (7)	125.8	5	2.9	80	2.3	1.4	9.1	10.4	21	-5	-7	234	1.24
illips-Van Heusen (11)	232.1	6	8.5	64	3.7	2.4	15.6	27.0	20	0	13	423	1.15
ebok International	797.4	15	62.3	7	7.8	8.4	25.5	29.0	12	22	10	2854	2.55
ssell	196.2	29	15.5	377	7.9	2.1	10.9	13.6	22	16	7	1511	1.67
ide Rite (1)	139.0	-1	17.0	4	12.2	11.7	26.4	27.7	18	15	36	1223	1.29
	817.6	33	43.7	53	5.3	4.7	13.7	19.5	16	-2	-1	2712	3.00
arnaco Group	130.5	7	4.4	NM	3.4	0.3	NM	NM	NA	NA	NA	426	NA

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 424 \$ MIL	12 MONTH EARNING PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4:24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
(b) APPLIANCES & HOME FURNISHINGS														
GROUP COMPOSITE	6243.9	9	120.2	211	1.9	0.7	7.9	10.0	26	7	-5	11858	0.97	
Armstrong World Industries	638.4	7	18.2	15	2.9	2.7	5.5	7.1	29	-7	-11	1257	1.17	
Best Buy (10)	339.9	58	5.1	41	1.5	1.7	6.8	6.1	20	24	-6	222	1.00	
Circuit City Stores (10)	903.3	22	44.0	65	4.9	3.6	17.0	19.5	21	29	22	1632	1.65	
Heilig-Meyers (10)	147.4**	29	6.8	71	4.6	3.5	8.2	10.2	22	13	12	633	1.47	
Interco (10)	373.2	8	-12.8	NM	NM	NM	NM	NM	NM	NA	NA	5	-1.25	
InterTan (6)	199.9	6	3.3	-21	1.7	2.3	NM	3.2	24	16	-25	187	0.87	
Kimball International (6)	162.5	24	8.9	72	5.5	3.9	10.5	11.0	17	11	6	566	1.58	
La-Z-Boy Chair (8)	148.9	-2	5.0	-17	3.4	4.0	9.4	10.5	17	9	2	426	1.38	
Leggett & Platt	284.7	8	13.9	84	4.9	2.9	9.9	13.8	19	13	-1	847	2.56	
Maytag	753.2	2	28.5	90	3.8	2.0	7.6	9.1	23	20	-15	2114	0.88	
Pier 1 Imports (10)	149.1	3	4.6	NM	3.1	NM	11.3	15.2	13	28	-3	345	0.71	
Toro (5)	159.3	-15	-11.9	NM	NM	4.3	NM	-7.8	NM	23	-6	189	-0.91	
Whirlpool	1719.0	7	35.0	46	2.0	1.5	9.8	11.8	18	3	-8	3221	2.60	
Zenith Electronics	265.2	-13	-28.6	NM	NM	NM	NM	-18.3	NM	-8	NA	215	-1.93	
(c) BEVERAGES														
GROUP COMPOSITE	11926.8	10	878.4	12	7.4	7.2	12.2	21.4	26	10	15	100180	1.96	
Anheuser-Busch	2621.1	3	224.0	12	8.5	7.9	12.8	21.7	16	12	14	14930	3.33	
Brown-Forman (8)	313.5	8	34.3	-10	11.0	13.1	16.1	20.0	15	4	12	2046	5.12	
Coca-Cola	2771.9	12	383.1	19	13.8	12.9	32.0	38.0	32	5	16	53823	2.53	
Coca-Cola Bottling	148.1	45	-2.3	NM	NM	NM	3.4	0.3	NM	6	NA	174	0.04	
Coca-Cola Enterprises	1112.0	25	-3.0	NM	NM	1.2	NM	-7.1	NM	-1	NA	1703	-0.86	
Coors (Adolph)	383.5	2	0.8	-88	0.2	1.7	NM	1.7	37	2	-17	675	0.49	
PepsiCo	4576.7	11	241.5	18	5.3	5.0	10.5	20.1	24	23	19	26829	1.39	
(d) PERSONAL CARE														
GROUP COMPOSITE	12874.9	10	790.0	7	6.1	6.3	14.9	24.0	23	2	22	64116	2.94	
Alberto-Culver (3)	274.2	28	10.2	13	3.7	4.2	10.2	12.6	22	18	18	711	1.15	
Avon Products	810.2	5	-42.1	NM	NM	2.4	36.9	56.1	23	-18	3	3553	2.17	
Clorox (6)	455.3	8	39.2	20	8.6	7.7	7.5	8.2	38	8	-5	2594	1.27	
Colgate-Palmolive	1600.5	9	113.8	25	7.1	6.2	7.0	8.8	58	5	70	7312	0.85	
Ecolab	234.0	13	11.2	47	4.8	3.7	12.9	19.2	17	0	-4	1089	2.03	
Gillette	1206.8	8	129.4	21	10.7	9.6	25.8	42.1	23	-4	71	10301	2.04	
Helene Curtis Industries (10)	294.3	18	6.5	153	2.2	1.0	8.6	12.0	19	20	-5	380	2.04	
NCH (8)	173.0	-1	10.2	-8	5.9	6.3	NA	15.4	12	10	26	513	5.00	
Procter & Gamble (6)	7483.0	10	474.0	12	6.3	6.2	14.6	26.2	20	1	30	34573	5.15	
Stanhome	168.8	8	8.2	20	4.9	4.4	20.3	19.3	15	18	14	670	2.29	
Tambrands	174.9	12	29.3	15	16.8	16.2	37.2	37.2	29	-5	-6	2419	2.03	
(e) TOBACCO														
GROUP COMPOSITE	19828.3	1	1557.2	30	7.9	6.1	12.9	22.0	17	10	3	96858	2.31	
American Brands	3833.6**	-1	245.2	14	6.4	5.6	14.1	19.7	12	10	17	9763	4.03	
Culbro (1)	262.1***	11	-0.8	NM	NM	0.3	3.3	1.4	41	-1	-23	71	0.40	
Philip Morris	11854.0	-1	1099.0	19	9.3	7.7	17.2	32.8	17	18	24	69794	4.45	
RJR Nabisco Holdings	3643.0	5	144.0	NM	4.0	0.1	6.9	4.7	28	-6	-46	10796	0.34	
UST	235.6*	16	69.9	18	29.7	29.2	51.9	57.2	25	6	21	6435	1.23	
7 CONTAINERS & PACKAGING														
INDUSTRY COMPOSITE	5593.2	5	147.4	12	2.6	2.5	4.7	7.2	28	9	10	15674	1.20	
(a) GLASS, METAL & PLASTIC														
GROUP COMPOSITE	2385.9	7	68.2	143	2.9	1.3	7.4	10.8	21	-3	5	5682	1.94	
Ball	546.3	22	11.8	10	2.2	2.4	9.0	11.9	14	2	-3	889	2.50	
Constar International	154.4	22	5.2	42	3.4	2.9	8.8	11.9	16	21	9	285	2.43	
Crown Cork & Seal	839.4	1	26.4	16	3.1	2.7	9.6	12.2	22	14	11	2946	4.51	
Owens-Illinois	845.8	4	24.8	NM	2.9	NM	5.7	5.7	33	-11	NA	1562	0.40	
(b) PAPER														
GROUP COMPOSITE	3207.3	3	79.2	-24	2.5	3.3	3.4	5.8	33	17	11	9992	1.01	
Bemis	289.6	4	10.7	31	3.7	2.9	12.4	16.9	22	11	18	1117	1.01	
Federal Paper Board	323.0	-3	16.8	-40	5.2	8.4	5.4	6.8	21	22	14	1342	1.51	
Longview Fibre (2)	152.7	0	3.9	168	2.6	1.0	4.4	5.1	44	10	-10	834	0.31	
Sonoco Products	429.8	5	22.8	0	5.3	5.6	14.1	16.8	18	11	7	1741	2.21	
Stone Container	1354.3	1	-9.8	NM	NM	0.1	NM	-3.9	NM	30	NA	1980	-0.91	
Temple-Inland	658.0	8	34.8	-17	5.3	6.9	5.8	8.6	23	12	15	2979	2.31	
8 DISCOUNT & FASHION RETAILING														
INDUSTRY COMPOSITE	91796.5	9	1218.0	-53	1.3	3.1	8.6	9.8	25	8	8	188121	1.41	
Ames Department Stores (11)	816.4	-14	8.1	NM	1.0	NM	NM	NM	NM	NA	NA	21	-7.8	
AutoZone (4)	197.1	28	10.8	87	5.5	3.8	23.6	22.6	46	NA	NA	2423	0.71	
Baker (J.) (11)	137.5	44	2.5	NM	1.8	0.1	7.4	7.8	18	36	6	146	0.71	
CML Group (5)	171.3	41	21.8	55	12.7	11.6	29.2	27.2	21	-9	22	616	1.81	
Caldor (11)	636.8	5	28.4	14	4.5	4.1	8.6	3.5	33	NA	NA	196	0.41	
Carter Hawley Hale Stores (11)	693.3**	-8	-102.4	NM	NM	NM	NM	NM	NM	NA	NA	57	-5.8	
Charming Shoppes (11)	295.6	15	19.7	36	6.7	5.7	15.2	17.3	25	21	3	1404	1.11	
Consolidated Stores (11)	246.3	18	16.9	142	6.9	3.3	11.2	13.1	30	21	-20	596	0.41	

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH				MARKET VALUE SHARES OUTSTANDING \$ MIL.	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
Costco Wholesale (4)	1572.9	26	33.3	53	2.1	1.7	13.8	13.9	41	57	82	4034	0.85	
Mayton Hudson (11)	5249.0**	8	192.0	-18	3.7	4.8	8.6	12.4	16	-1	17	4406	3.86	
Willard Department Stores (11)	1321.6**	9	93.3	1	7.1	7.6	10.0	13.0	22	25	19	4477	5.53	
Wollar General (11)	243.1	20	12.3	38	5.1	4.4	13.4	14.2	24	4	8	504	0.82	
Wolson Brothers Stores (11)	440.7	4	28.9	-2	6.6	7.0	13.2	16.8	13	8	21	786	2.83	
Wabri-Centers of America (11)	158.5	19	12.0	36	7.5	6.6	10.6	12.3	20	17	52	345	1.90	
Wamily Dollar Stores (4)	317.8	24	18.0	50	5.7	4.7	20.0	21.2	22	9	6	1123	0.90	
Wederated Department Stores (11)	2134.3**	-60	-966.9	NM	NM	1.8	NM	NM	NA	NA	NA	NA	NA	
Wilene's Basement (11)	139.6	18	3.9	98	2.8	1.7	16.6	18.2	28	NA	NA	452	0.81	
Wingerhut	309.5	-1	9.6	13	3.1	2.7	13.8	13.9	14	NA	NA	716	2.16	
Wiap (11)	803.5	29	83.9	49	10.4	9.0	NA	33.9	25	22	26	5786	1.62	
Wionesco (11)	125.3	-4	1.5	-32	1.2	1.7	2.5	0.1	NM	38	-12	134	0.01	
Wrossman's	153.5	4	-4.2	NM	NM	NM	6.2	2.7	27	33	-2	118	0.17	
Wschinger (11)	357.7	16	-1.5	NM	NM	NM	5.1	5.1	17	21	-3	479	0.66	
Wills Department Stores (11)	549.4	-18	24.4	NM	4.4	NM	NM	NM	4	NA	NA	30	0.39	
Wome Depot (11)	1298.7	29	67.6	63	5.2	4.1	13.1	14.7	51	50	44	13010	1.20	
Wome Shopping Network (4)	275.5	3	7.9	NM	2.9	NM	5.9	13.5	20	23	NA	492	0.28	
Wouse of Fabrics (11)	153.3	33	8.3	29	5.4	5.6	11.7	11.2	11	6	26	229	1.44	
Wobson Stores (11)	129.1**	1	3.8	0	3.0	3.0	5.0	5.1	21	13	-19	88	0.73	
Womesway (11)	254.5	-8	2.4	NM	1.0	NM	NM	-1.2	NM	4	NA	69	-0.09	
Wmart (11)	10718.0**	8	479.0	19	4.5	4.1	10.2	13.8	12	8	3	10013	4.04	
Wands' End (11)	270.9	18	20.4	36	7.5	6.5	22.6	22.7	23	37	-12	640	1.53	
Wmited (11)	2056.1**	18	200.3	16	9.7	9.9	15.5	23.7	21	27	21	8452	1.11	
Wonel (11)	160.3	-26	-38.2	NM	NM	3.0	NM	NM	NM	4	NA	4	-8.19	
Wowe's (11)	709.6	21	-43.3	NM	NM	0.9	NM	1.0	NM	9	6	1415	0.18	
Woy (R. H.) (5)	2055.9**	-6	-671.6	NM	NM	NM	NM	NM	NA	NA	NA	NA	NM	
Way Department Stores (11)	3362.0**	2	266.0	6	7.9	7.7	10.9	22.8	14	3	10	6986	4.02	
Wayville	2059.4	1	-12.8	NM	NM	NM	15.2	18.5	16	4	9	5119	3.09	
Waycantile Stores (11)	795.7**	1	41.1	-8	5.2	5.7	8.9	9.4	11	12	4	1225	3.10	
Wayerry-Go-Round Enterprises (11)	250.0	13	-2.5	NM	NM	6.3	NA	11.4	25	34	36	573	0.43	
Wayeyer (Fred) (11)	716.0	7	20.2	29	2.8	2.3	NA	13.5	13	20	6	543	1.80	
Wayichaels Stores (11)	144.2	8	7.6	58	5.3	3.6	14.0	8.5	24	14	-28	217	0.87	
Wayiman Marcus Group (5)	541.2**	0	11.4	-21	2.1	2.7	3.3	NM	NM	NA	NA	501	-0.67	
Wayrdstrom (11)	978.1	8	40.9	-12	4.2	5.1	11.5	14.5	20	16	11	2691	1.66	
Wayrinda Holdings (11)	164.6	-16	3.3	248	2.0	0.5	NM	1.2	NM	NA	NA	21	0.01	
Wayyless Cashways (1)	470.6	7	-22.8	NM	NM	NM	NM	NM	NA	NA	NA	NA	-2.21	
Waynney (J. C.) (11)	5653.0	2	37.0	-82	0.7	3.7	5.3	6.6	34	-4	-7	7699	1.97	
Wayp Boys-Manny, Moe & Jack (11)	243.4	15	9.6	44	3.9	3.1	8.1	10.5	31	20	9	1199	0.69	
Wayrie Stores (11)	387.8	3	6.8	NM	1.7	NM	2.7	2.5	60	7	-43	947	0.34	
Waye 'N' Save (11)	189.5	-1	20.6	13	10.9	9.5	13.0	15.1	15	11	-11	504	1.12	
Wayice (4)	1557.6**	12	20.6	-26	1.3	2.0	11.0	15.7	12	19	17	1513	2.58	
WayVC Network (11)	281.7	13	9.9	10	3.5	3.6	6.8	7.0	26	NA	NA	417	0.68	
Wayse's Stores (11)	431.3**	-9	-16.5	NM	NM	NM	NM	-14.6	NM	2	NA	88	-1.25	
Wayss Stores (11)	281.1	12	13.7	39	4.9	3.9	15.3	17.0	13	1	28	364	1.13	
Wayars, Roebuck	13508.5**	5	321.8	36	2.4	1.8	13.3	9.8	11	1	-3	15183	3.91	
Wayervice Merchandise	664.7	9	-9.4	NM	NM	NM	17.7	76.6	12	-32	20	967	1.19	
WayopKo Stores (10)	455.1	16	21.1	2	4.6	5.3	11.3	16.4	9	NA	NA	456	1.55	
Wayiegel	426.1	-5	1.0	2	0.2	0.2	4.4	3.7	42	27	-12	728	0.33	
Wayrawbridge & Clothier (11)	337.5**	4	18.3	32	5.4	4.3	6.6	5.8	18	11	-2	241	1.38	
Wayfany (11)	149.0	5	12.1	-20	8.1	10.6	NA	16.5	22	80	41	677	2.01	
WayX (11)	799.7	12	14.0	-8	1.8	2.1	13.8	26.9	16	-19	-10	1108	1.00	
Wayys 'R' Us (11)	2860.7	12	261.6	10	9.1	9.3	14.0	15.7	28	23	24	9361	1.15	
WayS. Shoe (11)	694.4	-2	12.6	NM	1.8	NM	7.5	7.9	18	0	11	714	0.88	
Waylue City Department Stores (5)	208.0**	16	14.1	12	6.8	7.0	23.4	23.9	17	NA	NA	469	0.93	
Waynture Stores (11)	521.9**	9	28.4	8	5.5	5.5	20.6	33.5	12	NA	NA	485	2.48	
Wayaban (11)	736.5	16	10.6	213	1.4	0.5	7.1	7.7	23	NA	NA	679	1.01	
Wayal-Mart Stores (11)	13638.8	32	602.4	25	4.4	4.7	18.3	25.1	37	33	32	59440	1.40	
Wayoolworth (11)	3136.0**	2	-128.0	NM	NM	4.9	NM	-2.3	NM	13	13	3746	-0.41	

ELECTRICAL & ELECTRONICS

INDUSTRY COMPOSITE	28158.3	4	1536.6	26	5.5	4.5	7.7	7.3	28	7	14	88971	1.30
ELECTRICAL PRODUCTS													
GROUP COMPOSITE	7717.9	3	382.4	-1	5.0	5.1	1.4	0.5	NM	9	10	29842	0.03
Oper Industries	1507.9**	1	71.0	10	4.7	4.3	9.6	10.4	19	21	16	6424	3.08
Person Electric (3)	1923.9	2	167.9	4	8.7	8.5	18.5	19.1	18	6	9	11713	2.88
bbell	187.7	3	23.6	6	12.6	12.3	16.6	17.7	18	10	11	1651	2.90
agneTek (6)	309.3	6	6.5	-42	2.1	3.8	8.7	16.8	12	102	57	333	1.25
ational Service Industries (4)	390.5	1	15.8	6	4.0	3.8	3.6	3.9	48	8	-8	1245	0.52
ychem (6)	313.1	-3	5.4	NM	1.7	NM	-1.7	-2.4	NM	7	NA	1245	-0.46
omas & Betts	259.5	72	0.1	NM	0.1	9.5	4.9	7.8	28	8	2	957	2.01
estinghouse Electric	2826.0	2	92.0	-6	3.3	3.5	NM	-29.2	NM	4	NA	6276	-3.67

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS				RETURN			5-YEAR GROWTH		MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL	12 MONTH EARNIN PER SHAR
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %				
(b) ELECTRONICS															
GROUP COMPOSITE	11016.9	4	551.9	21	5.0	4.3	9.6	9.9	15	7	7	22927	2.5		
E-Systems	497.2	4	27.5	11	5.5	5.2	13.6	15.0	10	14	12	1159	3.4		
GM Hughes Electronics	2921.1	7	181.4	87	6.2	3.6	7.3	7.1	15	4	-2	1605	1.4		
Harris (6)	734.6	-2	21.5	-21	2.9	3.6	NM	8.1	13	3	-9	1114	2.1		
Litton Industries (5)	1366.2	9	43.3	7	3.2	3.2	5.7	5.4	28	4	5	1801	3.1		
Motorola	3055.0	11	127.0	9	4.2	4.2	9.7	9.7	22	11	17	10460	3.5		
Raytheon	2128.0	-6	143.4	7	6.7	5.9	19.7	18.1	10	12	12	6088	4.5		
Varian Associates (3)	314.8	-13	7.8	-51	2.5	4.4	9.1	10.4	16	0	16	700	2.2		
(c) INSTRUMENTS															
GROUP COMPOSITE	4258.6	4	191.4	34	4.5	3.5	11.2	13.1	17	-4	18	11343	2.1		
Ametek	196.8	10	11.3	31	5.7	4.8	12.5	19.2	18	-3	0	742	0.9		
Beckman Instruments	213.0	9	9.3	15	4.4	4.1	11.8	11.3	15	-3	-5	581	1.3		
Honeywell	1481.6	1	116.8	63	7.9	4.9	17.1	20.3	14	-5	79	5063	5.3		
Imo Industries	229.2	-12	1.3	-65	0.6	1.5	6.1	2.7	21	13	-16	183	0.5		
Johnson Controls (3)	1183.5	10	16.5	65	1.4	0.9	8.3	10.9	17	2	-2	1656	2.4		
Millipore	197.1	3	15.6	4	7.9	7.9	11.4	12.7	17	10	2	1055	2.1		
Perkin-Elmer (5)	228.7	3	16.4	25	7.2	5.9	0.1	0.0	NM	-18	NA	1105	0.0		
Tektronix (7)	394.8	-1	-2.9	NM	NM	3.3	6.7	6.5	19	-15	5	546	0.9		
Teradyne	133.9	14	7.1	NM	5.3	NM	9.2	8.4	16	2	NA	411	0.8		
(d) SEMICONDUCTORS															
GROUP COMPOSITE	5164.7	7	411.0	71	8.0	5.0	14.5	7.7	29	13	117	24858	1.1		
Advanced Micro Devices	407.4	49	84.9	NM	20.8	1.5	26.7	24.6	6	7	NA	1305	2.4		
AMP	818.6	3	70.2	0	8.6	8.8	13.9	13.6	24	11	8	6323	2.4		
Analog Devices (2)	131.3	-1	-1.0	NM	NM	2.8	NM	1.0	NM	5	-17	457	0.0		
Intel	1241.3	10	184.1	-7	14.8	17.4	16.6	17.2	14	31	35	10553	3.8		
LSI Logic	150.5	-16	0.3	-86	0.2	1.2	2.2	2.2	43	1	8	284	0.1		
Micron Technology (4)	128.2	36	1.5	NM	1.1	NM	3.7	3.7	28	55	-72	519	0.4		
Molex (6)	191.7	8	16.6	12	8.7	8.4	11.6	10.5	25	16	14	1636	1.3		
National Semiconductor (7)	401.8	4	14.5	190	3.6	1.3	NA	-29.5	NM	-2	NA	926	-1.4		
Texas Instruments	1694.0	3	40.0	NM	2.4	NM	NA	-22.1	NM	0	NA	2854	-4.2		
10 FOOD															
INDUSTRY COMPOSITE	75232.2	2	1993.1	6	2.7	2.6	12.8	21.0	19	10	12	149721	1.8		
(a) FOOD DISTRIBUTION															
GROUP COMPOSITE	10780.7	7	135.1	14	1.3	1.2	10.4	13.7	17	15	14	8752	1.9		
Fleming	3917.3	2	37.3	14	1.0	0.8	6.8	7.8	14	15	8	1059	2.1		
Nash Finch	531.9**	3	2.3	7	0.4	0.4	9.4	10.7	11	8	2	204	1.7		
Richfood Holdings (8)	251.3	5	3.6	58	1.4	0.9	16.6	20.0	16	23	NA	194	1.1		
Rykoff-Sexton (8)	389.9	10	1.5	-34	0.4	0.6	5.6	7.1	16	17	3	210	1.1		
Smart & Final	157.7	13	2.0	29	1.3	1.1	3.9	3.2	NM	NA	NA	292	0.0		
Super Food Services (4)	412.3**	1	2.0	12	0.5	0.4	7.1	8.6	9	14	5	108	1.0		
Super Rite (10)	305.2	23	2.8	NM	0.9	NM	9.2	12.6	21	-48	NA	105	0.6		
Super Valu Stores (10)	2628.7	12	47.5	1	1.8	2.0	14.6	19.0	9	13	13	1952	2.7		
Sysco (6)	2186.4	11	36.1	15	1.7	1.6	11.8	16.6	28	18	22	4628	1.7		
(b) FOOD PROCESSING															
GROUP COMPOSITE	32701.6	2	1420.7	6	4.3	4.2	14.5	21.8	19	9	11	110430	2.1		
American Maize Products	125.1	7	0.1	11	0.1	0.1	8.0	8.1	11	3	8	144	2.0		
Borden	1698.4	-1	61.1	-4	3.6	3.7	10.3	14.8	17	5	7	5014	1.9		
Campbell Soup (5)	1746.3	-1	160.6	19	9.2	7.6	17.5	23.5	19	2	-29	8366	1.7		
Chiquita Brands International	1158.3	-2	5.5	-89	0.5	4.2	7.0	8.8	12	19	18	1017	1.7		
ConAgra (7)	4848.5	-4	84.1	20	1.7	1.4	12.6	15.7	17	25	16	6055	1.5		
CPC International	1534.3	1	88.2	6	5.8	5.5	17.3	27.9	32	7	14	12743	2.6		
Curtice-Burns Food (6)	222.0	-3	0.4	NM	0.2	NM	6.8	2.6	41	10	-13	114	0.3		
Dean Foods (7)	566.3	9	13.7	-17	2.4	3.2	13.2	15.6	14	20	13	955	1.7		
Dekalb Genetics (4)	134.4	4	5.6	-39	4.2	7.1	8.7	12.6	11	5	25	150	2.6		
Dole Food	753.3	8	26.7	4	3.5	3.7	9.9	12.9	14	18	10	1938	2.2		
Daskocil	176.2	-15	0.4	NM	0.2	NM	NM	-40.7	NM	-2	NA	83	-7.1		
Flowers Industries (6)	201.8	8	6.8	57	3.4	2.3	9.4	12.8	21	5	-1	556	0.7		
General Mills (7)	1868.3	7	132.1	1	7.1	7.5	19.7	35.8	21	9	22	10485	2.9		
Heinz (H. J.) (8)	1622.4	1	115.3	-11	7.1	8.0	23.8	28.5	15	11	14	9307	2.4		
Hershey Foods	801.0	17	58.9	21	7.4	7.1	14.2	17.2	16	13	12	3607	2.5		
Hormel (Geo. A.) (2)	628.5	-10	17.0	-16	2.7	2.9	13.2	14.0	17	11	18	1381	1.0		
Hudson Foods (3)	190.1	11	-2.7	NM	NM	0.3	3.8	3.4	24	21	-9	103	0.3		
IBP	2652.9	5	19.4	NM	0.7	NM	6.2	6.2	28	-8	-67	828	0.6		
International Multifoods (10)	551.7	2	9.3	11	1.7	1.5	11.0	11.7	12	4	8	480	2.0		
Interstate Bakeries (7)	340.4	4	6.1	NM	1.8	NM	9.6	8.3	68	NA	NA	329	0.2		
Kellogg	1515.1	7	196.2	20	13.0	11.5	26.7	29.6	21	18	12	13496	2.6		
McCormick (1)	322.3	0	17.3	14	5.4	4.7	15.5	21.3	23	8	30	1873	1.0		
Pet (6)	476.9	1	24.0	28	5.0	4.0	10.5	19.7	20	NA	NA	2069	0.9		
Pioneer Hi-Bred International (4)	178.8	29	-6.2	NM	NM	NM	17.6	17.5	18	6	10	1971	3.7		
Quaker Oats (6)	1335.2	0	56.6	-10	4.2	4.7	15.3	32.8	16	-2	6	3867	3.7		
Ralston Purina (3)	1866.3	2	86.1	-13	4.6	5.4	13.8	39.9	15	-28	9	5329	3.3		

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS				RETURN		5-YEAR GROWTH				MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %	PER SHARE %	PER SHARE %	PER SHARE %		
Sara Lee (6)	3143.4	8	137.6	14	4.4	4.2	14.6	24.3	17	13	17	11726	2.97			
Smithfield Foods (8)	315.6	2	10.5	-19	3.3	4.2	18.3	24.6	9	20	22	251	1.76			
Thorn Apple Valley (7)	155.5	-15	3.3	-35	2.1	2.8	27.0	31.0	6	3	129	113	5.23			
Tyson Foods (3)	1040.5	12	36.8	11	3.5	3.5	9.7	17.8	15	33	21	2284	1.10			
Universal Foods (3)	223.2	11	12.7	1	5.7	6.2	13.9	19.1	14	12	28	839	2.19			
Wrigley (Wm.) Jr.	308.7	9	37.1	17	12.0	11.2	28.6	28.9	22	10	21	2955	3.42			
FOOD RETAILING																
GROUP COMPOSITE	31750.0	0	437.3	1	1.4	1.4	9.7	22.2	23	11	12	30540	1.05			
Albertson's (11)	2198.7	4	80.9	10	3.7	3.5	20.0	21.5	22	16	21	5583	1.94			
American Stores (11)	5216.6	-9	58.9	-32	1.1	1.5	8.6	16.0	10	12	1	2320	3.47			
Bruno's (6)	721.4	2	15.5	-9	2.2	2.4	11.1	15.0	21	18	18	1279	0.76			
Casey's General Stores (8)	142.4*	-2	2.7	5	1.9	1.7	8.3	11.8	15	12	4	171	1.01			
Circle K (8)	690.9**	-24	-11.0	NM	NM	NM	NM	NM	NM	NA	NA	20	-5.81			
Dairy Mart Convenience Stores (11)	132.5*	-6	0.4	120	0.3	0.1	NA	10.6	12	4	-8	50	0.75			
Delchamps (6)	236.4	1	2.5	-29	1.1	1.5	7.8	8.7	16	9	17	148	1.31			
Flag Food Centers (11)	274.0	-5	2.7	NM	1.0	NM	NM	14.9	8	NA	NA	76	0.82			
Food Lion	1596.5	13	49.6	13	3.1	3.1	17.3	24.4	30	26	27	6328	0.65			
Foodarama Supermarkets (2)	177.5	5	0.4	NM	0.2	NM	2.4	0.2	NM	3	NA	20	0.06			
General Nutrition (11)	125.3	15	0.2	NM	0.1	NM	NM	NM	NA	-46	NA	NA	NA			
Giant Food (10)	1151.7	9	24.7	-38	2.1	3.8	12.0	14.4	14	16	21	1251	1.47			
Great Atlantic & Pacific Tea (10)	2739.9	-1	16.1	-49	0.6	1.1	5.9	5.6	18	13	23	1275	1.85			
Hannaford Brothers	486.8**	0	8.8	10	1.8	1.7	10.4	14.7	22	21	17	964	1.10			
Kroger	5038.5	3	21.0	95	0.4	0.2	22.6	NM	14	NA	5	1556	1.23			
Kenn Traffic (11)	705.1**	0	2.6	NM	0.4	0.0	-0.7	-27.6	NM	NA	NA	268	-1.03			
Kuddick (3)	387.6	7	7.3	16	1.9	1.7	10.6	12.4	14	14	13	417	1.28			
Kwikway	3395.9	0	22.9	-14	0.7	0.8	7.0	35.1	25	NA	NA	1515	0.62			
Kwikway Food Town (4)	139.8	-3	0.4	NM	0.3	0.0	6.9	6.8	16	5	4	40	1.06			
Kwikway's Food & Drug Centers	669.5	26	13.1	26	2.0	2.0	6.7	9.9	21	NA	NA	1056	1.68			
Kwikway & Shop (11)	1321.1	-6	31.1	27	2.4	1.7	7.8	33.5	17	-31	-41	472	0.86			
Kwikway Super Market (5)	179.9	3	-1.0	NM	NM	0.2	2.7	0.8	50	16	-12	20	0.14			
Kwikway's	1268.2	4	15.1	19	1.2	1.0	9.4	13.7	18	29	NA	1211	1.59			
Weis Markets	320.7	-1	18.4	-11	5.7	6.4	11.8	12.1	15	10	5	1139	1.76			
Winn-Dixie Stores (6)	2433.0	2	53.9	12	2.2	2.0	20.8	21.0	18	4	10	3362	2.39			
FUEL																
INDUSTRY COMPOSITE	97282.1	-11	2683.8	-55	2.8	5.5	6.2	8.0	23	2	17	256766	1.88			
COAL																
GROUP COMPOSITE	824.9	7	8.4	-18	1.0	1.3	3.0	-1.5	NM	3	NA	1048	-0.22			
Arco Industries	316.9	4	1.1	-38	0.3	0.6	7.1	5.7	24	16	-6	474	2.23			
Bituminous	508.0**	9	7.3	-14	1.4	1.8	NM	-9.5	NM	-5	NA	574	-0.80			
OIL & GAS																
GROUP COMPOSITE	91424.3	-12	2477.6	-57	2.7	5.6	6.0	7.8	23	2	11	232202	1.93			
Ames Hess	1450.5**	-29	-23.4	NM	NM	3.7	2.3	-0.5	NM	10	-5	3233	-0.18			
Amoco	5649.0	-15	234.0	-52	4.1	7.4	5.3	6.5	24	5	10	22328	1.85			
Arco Oil (3)	2096.3	5	-9.1	NM	NM	1.3	7.8	10.2	12	8	-1	1924	2.59			
Atlantic Richfield	4327.0*	-8	180.0	-49	4.2	7.5	7.2	7.8	31	6	8	16511	3.34			
Burlington Resources	444.0	-5	62.9	-4	14.2	14.1	5.6	6.7	27	-2	47	5225	1.47			
Chevron	9680.0***	-11	304.0	-45	3.1	5.1	5.6	7.1	23	-1	9	23080	2.98			
Coastal	2536.1	-2	22.4	-59	0.9	2.1	5.2	3.1	43	24	12	2710	0.61			
Crown Central Petroleum	322.2	-13	-6.2	NM	NM	NM	NM	-2.0	NM	15	NA	214	-0.63			
Diamond Shamrock	589.8	-8	-10.8	NM	NM	0.7	5.0	5.0	23	38	32	549	0.85			
Exxon	24955.0**	-10	1350.0	-40	5.4	8.1	9.1	13.6	16	0	2	73087	3.74			
Fina	661.0	-19	-5.5	NM	NM	1.0	4.1	2.5	39	13	-17	1104	1.81			
Kerr-McGee	782.7	0	8.6	-71	1.1	3.8	4.9	5.3	23	3	5	1833	1.67			
Louisiana Land & Exploration	182.9**	-2	-25.9	NM	NM	4.4	NM	-3.0	NM	-7	4	969	-0.46			
Lapco	669.1*	-5	34.7	-38	5.2	8.0	11.0	25.4	16	-7	24	1643	3.50			
Laurus Energy	168.8	-20	-38.3	NM	NM	6.7	-5.6	NM	NM	NA	NA	654	-1.04			
Mitchell Energy & Development (11)	256.2	4	13.2	-25	5.1	7.1	5.1	7.0	17	1	5	738	0.95			
Mobil	13648.0**	-10	127.0	-82	0.9	4.7	6.4	7.6	19	1	8	24701	3.20			
Murphy Oil	366.0**	-15	-1.1	NM	NM	6.9	-2.9	-3.3	NM	8	NA	1596	-1.13			
Occidental Petroleum	2154.0	-22	21.0	-76	1.0	3.2	6.2	7.1	20	-1	12	6151	1.04			
Pennzoil	642.8**	0	-11.7	NM	NM	3.5	NM	-6.5	NM	21	NA	1824	-1.89			
Phillips Petroleum	2759.0**	-22	-88.0	NM	NM	5.3	-1.0	-6.4	NM	12	17	6105	-0.68			
Quaker State	199.9	6	1.3	374	0.6	0.1	5.3	5.4	22	-4	-20	370	0.62			
Sun	2530.0***	-15	-21.0	NM	NM	1.7	NM	-7.6	NM	-13	NA	2931	-1.92			
Texaco	8560.0**	-16	200.0	-52	2.3	4.1	9.5	11.3	16	-7	10	15704	3.78			
Union Texas Petroleum Holdings	196.0**	-45	49.0	-16	25.0	16.3	18.7	34.2	7	50	120	1541	2.49			
Unocal	2172.0**	-12	16.0	-79	0.7	3.1	3.8	0.6	NM	9	2	5660	0.06			
Unocal Exploration	209.9**	-23	39.3	-46	18.7	26.6	NA	14.9	29	NA	-2	3301	0.45			
SX-Marathon Group	2941.0*	-14	35.0	-51	1.2	2.1	NM	-3.1	NM	NA	NA	5358	-0.45			
Valero Energy†	275.1	-4	20.1	-3	7.3	7.2	9.8	13.6	12	12	43	1158	2.29			

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL.	12 MONTH EARNING PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
(c) PETROLEUM SERVICES														
GROUP COMPOSITE	5032.9	-3	197.8	-9	3.9	4.2	11.7	11.9	21	2	37	23516	1.65	
Baker Hughes (3)	622.7	-12	18.2	-55	2.9	5.7	9.5	8.9	20	17	44	2773	1.02	
Baroid	147.1	10	3.7	25	2.5	2.2	7.6	7.0	24	-6	NA	428	0.24	
Dresser Industries (2)	1036.2	-6	10.2	-28	1.0	1.3	8.8	7.6	21	3	184	2796	1.00	
Halliburton	1674.8**	-3	9.4	-66	0.6	1.6	1.0	0.4	NM	1	-4	2702	0.08	
Schlumberger	1552.1	3	156.3	18	10.1	8.8	22.0	21.8	18	-2	17	14818	3.51	
12 HEALTH CARE														
INDUSTRY COMPOSITE	44225.3	10	4828.6	14	10.9	10.6	19.9	25.8	21	10	17	335584	2.64	
(a) DRUG DISTRIBUTION														
GROUP COMPOSITE	9485.2	16	146.6	-22	1.5	2.3	10.3	13.4	18	10	11	9771	1.36	
Arbor Drugs (5)	124.4	16	5.1	23	4.1	3.9	13.7	13.7	21	23	19	323	0.93	
Bergen Brunswig (4)	1219.9**	17	15.5	-1	1.3	1.5	8.7	12.9	16	25	22	758	1.28	
Big B (11)	140.0	3	3.3	33	2.3	1.8	9.7	9.2	17	12	NA	111	0.86	
Bindley Western Industries	647.1	19	3.1	12	0.5	0.5	13.2	13.6	9	13	22	100	1.62	
Drug Emporium (10)	204.8	12	-3.6	NM	NM	0.6	NA	-8.2	NM	39	2	94	-0.36	
Durr-Fillauer Medical	261.9	18	3.9	-4	1.5	1.8	10.4	14.2	16	21	19	276	1.46	
Fay's (11)	239.0	25	4.5	-11	1.9	2.6	7.5	10.9	18	6	39	157	0.55	
Longs Drug Stores (11)	648.5	-5	15.6	-9	2.4	2.5	NA	13.6	13	5	13	700	2.71	
McKesson (9)	2775.7**	28	-25.2	NM	NM	1.3	5.4	5.5	39	-6	3	1266	0.84	
Perry Drug Stores (2)	175.5	6	2.5	73	1.5	0.9	10.2	14.0	13	-11	-15	90	0.70	
Rite Aid (10)	1010.5	8	44.7	15	4.4	4.2	10.0	13.5	15	15	7	1832	1.42	
Walgreen (4)	2038.0	12	77.1	14	3.8	3.7	15.6	18.9	20	15	15	4061	1.68	
(b) DRUGS & RESEARCH														
GROUP COMPOSITE	16170.9	8	3207.1	15	19.8	18.5	27.6	32.4	21	12	16	219560	3.31	
Allergan	210.1	7	20.1	20	9.6	8.6	NM	-12.6	NM	-2	NA	1413	-0.87	
American Home Products	1998.5	13	406.3	15	20.3	20.0	40.4	43.3	17	4	11	24066	4.53	
Amgen	220.2	58	63.2	72	28.7	26.4	17.5	20.2	61	41	145	6881	0.84	
Bristol-Myers Squibb	2783.4	2	547.5	11	19.7	18.0	35.7	36.4	18	17	10	38314	4.00	
Lilly (Eli)	1557.1	8	442.6	14	28.4	27.1	24.8	27.6	15	11	23	20008	4.66	
Marion Merrell Dow	779.0	21	170.0	22	21.8	21.6	34.6	41.3	16	50	43	9809	2.19	
Merck	2223.4	9	568.7	18	25.6	23.6	36.2	44.9	25	16	27	54305	5.71	
Pfizer	1761.3	4	295.1	10	16.8	15.8	14.8	14.9	31	8	2	22663	2.21	
Rhone-Poulenc Rorer	897.8**	-3	71.7	34	8.0	5.8	19.8	34.2	21	19	17	7222	2.48	
Schering-Plough	1021.9	8	192.9	11	18.9	18.2	31.3	49.4	17	2	23	10599	3.16	
Syntex (5)	530.9	20	121.6	20	22.9	22.9	34.5	38.5	22	6	17	9922	2.03	
Upjohn	875.8	9	143.7	8	16.4	16.5	20.2	30.9	11	1	16	6045	3.03	
Warner-Lambert	1311.5	8	163.6	17	12.5	11.5	12.6	14.1	50	8	-4	8311	1.23	
(c) HEALTH CARE SERVICES														
GROUP COMPOSITE	8276.8	11	373.4	23	4.5	4.1	9.9	13.6	20	3	26	19696	0.84	
American Medical Holdings (4)	571.1	-12	9.9	NM	1.7	NM	6.3	4.1	24	NA	NA	670	0.36	
Beverly Enterprises	609.8	12	7.0	57	1.1	0.8	6.1	6.1	20	-5	NA	598	0.48	
Continental Medical Systems (6)	176.0	64	7.2	74	4.1	3.9	12.3	12.4	26	35	62	605	0.63	
Foundation Health (6)	270.2	8	12.1	39	4.5	3.5	36.5	36.1	14	NA	NA	506	1.71	
HCA-Hospital Corp. of America	1332.0	6	76.9	75	5.8	3.5	10.0	4.2	NM	-32	NA	2272	0.03	
Healthtrust (4)	573.7	16	21.7	192	3.8	1.5	5.8	-24.3	NM	43	NA	1056	-0.43	
Hillhaven (7)	280.6	-9	3.1	NM	1.1	0.0	NM	-63.3	NM	NA	NA	247	-0.88	
Humana (4)	1624.0	18	86.0	-1	5.3	6.3	13.5	16.8	11	18	35	3803	2.21	
Lifetime	212.3	14	3.7	-16	1.8	2.4	8.7	12.2	NM	30	36	219	-2.21	
Manor Care (7)	223.1	13	9.2	72	4.1	2.7	8.7	15.3	22	6	-6	902	0.71	
National Health Laboratories	176.4	24	29.7	21	16.8	17.3	32.3	33.0	20	4	28	2182	1.11	
National Medical Enterprises (7)	971.4	2	44.5	-38	4.6	7.4	10.0	14.9	9	12	18	2531	1.51	
OrNda Healthcorp (4)	124.4**	13	-0.7	NM	NM	1.1	10.3	3.4	17	NA	NA	156	0.63	
PacificCare Health Systems (3)	428.6	40	10.2	45	2.4	2.3	21.1	30.8	18	28	62	584	2.81	
U. S. Healthcare	523.1**	31	45.4	36	8.7	8.3	47.0	47.0	20	15	71	3183	2.21	
Universal Health Services	179.8	2	7.4	-23	4.1	5.5	7.1	9.8	10	5	32	182	1.31	
(d) MEDICAL PRODUCTS														
GROUP COMPOSITE	10292.4	10	1101.4	15	10.7	10.3	17.7	21.6	22	12	20	86558	2.11	
Abbott Laboratories	1877.9	14	294.2	16	15.7	15.4	31.9	35.2	23	12	17	26366	2.61	
Bard (C. R.)	237.5	12	16.8	24	7.1	6.4	16.3	16.5	23	6	0	1385	1.11	
Bausch & Lomb	371.9	10	28.7	15	7.7	7.3	10.9	11.0	32	11	6	2788	1.41	
Baxter International	2296.0	8	131.0	19	5.7	5.2	11.4	14.6	17	10	23	10051	2.11	
Becton, Dickinson (3)	592.0	6	51.5	5	8.7	8.8	10.0	13.5	14	11	12	2569	4.71	
Imcra Group (6)	433.5	6	32.6	20	7.5	6.7	9.5	10.3	20	NA	116	2306	1.51	
Johnson & Johnson	3357.0	7	464.0	11	13.8	13.3	22.9	26.8	20	14	29	30693	4.51	
Medtronic (8)	299.5	19	39.4	15	13.2	13.6	20.5	19.8	26	14	15	3967	2.51	
Mine Safety Appliances	128.2	8	3.6	-37	2.8	4.8	5.3	6.0	17	8	6	282	2.61	
Owens & Minor	284.3	18	3.2	81	1.1	0.7	8.4	11.5	21	15	2	231	0.81	
U. S. Surgical	277.1	46	29.7	84	10.7	8.5	16.0	28.0	57	24	36	5387	1.71	
Westmark International	137.5	15	6.7	13	4.8	4.9	7.0	6.8	24	5	22	531	2.11	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS			RETURN			5-YEAR GROWTH		MARKET VALUE SHARES OUTSTANDING 4/24 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4/24	COMMON EQUITY %	EARNINGS PER SHARE %			
HOUSING & REAL ESTATE														
INDUSTRY COMPOSITE	6824.3	5	40.4	NM	0.6	NM	2.6	-0.3	NM	5	38	19397	0.02	
BUILDING MATERIALS														
GROUP COMPOSITE	5304.1	7	9.5	NM	0.2	NM	0.4	-3.3	NM	5	42	17165	-0.23	
Lafarge	211.1	-2	-77.5	NM	NM	NM	NM	-5.8	NM	13	NA	963	-0.83	
Manville	496.9	6	9.3	-24	1.9	2.6	NM	-19.6	NM	-20	NA	432	-0.42	
Owens-Corning Fiberglas	626.0	2	6.0	NM	1.0	NM	NM	NM	NM	NA	NA	1484	-11.70	
Ply Gem Industries	128.0	16	-2.7	NM	NM	NM	5.3	4.5	27	7	-18	137	0.49	
PPG Industries	1446.7	5	78.8	260	5.4	1.6	8.3	9.8	26	6	-2	6808	2.43	
RPM (7)	125.5	21	4.3	29	3.4	3.2	11.8	14.8	22	13	14	696	1.02	
Sherwin-Williams	594.6	13	13.0	73	2.2	1.4	13.6	15.4	18	12	8	2421	1.52	
Tecumseh Products	332.4	5	15.8	222	4.8	1.5	7.5	7.5	13	7	-15	717	9.76	
Texas Industries (7)	135.5**	-1	-6.5	NM	NM	NM	NA	0.9	88	9	80	220	0.23	
JSG	426.0	2	-50.0	NM	NM	NM	NM	NM	NM	NA	NA	77	-2.79	
Valspar (2)	131.5	8	3.6	79	2.7	1.7	17.3	19.5	26	15	15	758	1.34	
Vulcan Materials	210.6	7	4.6	NM	2.2	NM	7.8	8.7	24	6	-5	1444	1.56	
York International	439.3	25	10.8	NM	2.5	0.0	8.1	9.4	38	NA	143	1010	0.91	
CONSTRUCTION & REAL ESTATE														
GROUP COMPOSITE	1520.2	-2	30.9	NM	2.0	NM	7.0	8.3	18	8	2	2232	0.83	
Dentex (9)	522.5**	2	9.4	122	1.8	0.8	9.0	6.8	21	8	7	684	2.21	
Evonnanian Enterprises (10)	123.1**	14	3.0	122	2.4	1.3	5.3	1.2	NM	26	NA	261	0.07	
Caufman & Broad Home (1)	184.5	-42	3.4	30	1.8	0.8	7.3	10.6	21	9	-4	500	0.82	
HMM	257.1**	1	9.5	NM	3.7	0.1	NA	14.5	9	13	28	473	2.06	
Hyland Group	290.6	26	2.6	NM	0.9	NM	7.0	6.3	20	16	-21	262	1.08	
J. S. Home	142.4**	16	3.0	NM	2.1	NM	NM	-1.1	NM	-19	NA	51	0.02	
LEISURE TIME INDUSTRIES														
INDUSTRY COMPOSITE	18615.7	9	846.1	33	4.5	3.7	7.9	12.4	23	8	7	87191	1.59	
EATING PLACES														
GROUP COMPOSITE	3873.7	6	207.9	23	5.4	4.6	9.1	17.2	21	11	14	21516	1.38	
Job Evans Farms (8)	141.4	12	10.4	19	7.3	6.9	NA	14.2	26	13	9	1002	0.91	
Prinker International (6)	131.9	23	9.3	45	7.0	6.0	14.0	14.9	34	40	29	1050	1.08	
McDonald's	1618.3	4	187.4	11	11.6	10.8	11.6	18.9	18	12	14	15783	2.39	
Morrison (7)	261.4**	6	9.2	24	3.5	3.0	NA	16.0	19	3	9	576	1.85	
Honey's (2)	297.5**	8	9.0	48	3.0	2.2	26.8	NM	22	NA	-10	890	1.00	
izzler International (8)	158.7	11	4.6	-22	2.9	4.1	7.0	6.7	18	17	18	368	0.69	
W Holdings	859.8	3	-34.4	NM	NM	NM	NM	-76.1	NM	NA	NA	433	-0.53	
icorp Restaurants (2)	128.8**	3	4.8	39	3.7	2.8	9.4	8.1	26	1	26	220	0.84	
Vendy's International	275.8	13	7.7	30	2.8	2.4	8.3	11.2	23	2	76	1193	0.54	
ENTERTAINMENT														
GROUP COMPOSITE	3104.7	18	229.5	47	7.4	6.0	10.3	12.1	28	22	7	28491	2.29	
lockbuster Entertainment	254.0	44	25.7	62	10.1	9.0	17.7	21.4	25	110	69	2432	0.61	
isney (Walt) (3)	1655.1	15	164.1	30	9.9	8.8	12.4	17.4	28	23	23	19708	5.33	
ing World Productions (4)	125.0	16	21.3	1	17.0	19.7	33.5	33.5	11	43	41	982	2.38	
aramount Communications (2)	1070.6	19	18.4	NM	1.7	NM	4.9	3.8	36	18	-19	5370	1.25	
HOTEL & MOTEL														
GROUP COMPOSITE	2928.0	8	80.8	108	2.8	1.4	8.3	15.8	20	-4	-2	7914	1.49	
casars World (5)	253.5	22	23.1	480	9.1	1.9	15.8	21.5	11	-1	8	832	3.24	
ircus Circus Enterprises (11)	187.6	6	19.1	29	10.2	8.4	18.7	33.8	23	-5	27	2426	1.84	
ilton Hotels	276.3**	4	22.2	80	8.0	4.6	7.0	9.9	24	6	-3	2244	1.96	
arriott	1953.0	7	11.0	10	0.6	0.5	5.9	16.5	20	-15	-18	1504	0.77	
romus	257.7	14	5.5	NM	2.1	NM	9.0	10.0	23	NA	NA	907	1.18	
OTHER LEISURE														
GROUP COMPOSITE	8709.3	8	327.9	21	3.8	3.4	6.0	9.8	22	4	5	29270	1.42	
merican Greetings (10)	423.2**	11	26.8	21	6.3	5.8	9.8	11.6	14	6	4	1425	2.80	
runswick	588.1	19	12.2	NM	2.1	NM	NM	-0.4	NM	1	NA	1484	0.03	
arnival Cruise Lines (1)	328.8	12	46.8	25	14.2	12.8	16.9	22.5	15	34	13	3972	1.90	
PI (11)	124.4	15	10.3	-19	8.3	11.7	16.5	17.1	14	18	20	367	1.80	
astman Kodak	4410.0	0	145.0	-19	3.3	4.0	NM	-0.3	NM	0	-40	12672	-0.05	
sher-Price	146.8	20	3.4	NM	2.3	NM	NM	-9.3	NA	NA	NA	575	NA	
eeetwood Enterprises (8)	341.1	22	6.4	234	1.9	0.7	10.8	8.4	22	9	1	864	1.71	
arley-Davidson	247.4	26	8.7	93	3.5	2.3	15.6	17.3	25	52	31	1001	2.28	
arman International Industries (6)	152.0	2	1.7	NM	1.1	NM	NM	-8.7	NM	24	NA	103	-0.87	
asbro	452.6	48	23.2	13	5.1	6.7	8.1	8.8	27	11	3	2219	0.95	
uffy	179.6	6	5.9	-3	3.3	3.6	12.3	15.7	12	12	27	223	1.49	
attel	326.1	22	14.8	32	4.5	4.2	24.8	27.9	18	30	42	2121	1.89	
utboard Marine (3)	263.7	13	1.8	NM	0.7	NM	NM	-12.4	NM	3	NA	418	-2.83	
laroid	431.3	-2	6.2	-62	1.4	3.7	49.5	85.4	2	-21	35	1211	12.20	
ans World Music (11)	160.0	16	11.7	24	7.3	6.8	13.0	14.9	17	62	32	207	1.32	
eco Toys	134.2	79	2.9	NM	2.2	NM	14.2	13.4	15	65	7	409	2.71	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		MARGINS			RETURN			5-YEAR GROWTH		MARKET VALUE SHARES OUTSTANDING \$ MIL.	12 MONTH EARNIN PER SHARE
	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 %	1ST QUARTER 1991 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	PE 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
15 MANUFACTURING														
INDUSTRY COMPOSITE	25697.8	1	628.5	-9	2.4	2.7	6.2	6.9	33	8	9	88605	1.22	
(a) GENERAL MANUFACTURING GROUP COMPOSITE	9508.8	4	573.8	7	6.0	5.8	11.9	13.8	23	9	9	49946	2.07	
Avery Dennison	669.8	2	20.3	19	3.0	2.6	7.2	8.1	25	19	-19	1631	1.07	
Barnes Group	134.6	3	3.7	92	2.7	1.5	9.1	12.7	12	4	-1	205	2.88	
Blount (10)	176.7	23	-2.1	NM	NM	NM	NM	-3.6	NM	3	-9	93	-0.42	
Carlisle	132.6	15	5.4	76	4.0	2.6	4.9	4.7	34	2	-9	304	1.16	
Corning†	804.6**	15	77.8	65	9.7	6.8	12.7	16.9	20	8	12	7089	1.81	
Crane	313.5	2	9.0	0	2.9	2.9	12.9	15.0	18	10	5	769	1.47	
Great American Management (5)	306.4	1	-5.0	NM	NM	NM	7.2	3.8	37	17	135	277	0.68	
Harsco	408.1	-10	20.8	74	5.1	2.6	15.7	17.8	11	0	7	928	3.22	
Hillenbrand Industries (1)	348.1	23	26.6	37	7.6	6.8	14.6	19.7	31	11	13	2940	1.33	
Illinois Tool Works	669.5	10	40.2	-2	6.0	6.8	12.9	14.4	20	21	16	3559	3.22	
Jostens (6)	165.6	-1	10.4	-6	6.3	6.6	18.6	21.0	16	15	11	1061	1.58	
Mark IV Industries (10)	286.1	8	7.2	53	2.5	1.8	9.3	9.6	15	47	33	524	0.97	
Minnesota Mining & Mfg.	3406.0	1	288.0	-4	8.5	8.9	16.7	17.8	18	7	10	20292	5.21	
Newell	310.1	14	27.4	12	8.8	9.0	16.0	19.7	24	29	29	2718	1.81	
Parker Hannifin (6)	606.1	0	17.1	24	2.8	2.3	5.5	5.1	35	7	-5	1725	1.02	
Rubbermaid†	448.4	9	26.6	-31	5.9	9.4	16.5	16.5	34	20	16	5146	0.91	
Trinova	422.6	-3	0.5	-76	0.1	0.4	NM	-51.7	NM	-5	NA	685	-6.57	
(b) MACHINE & HAND TOOLS GROUP COMPOSITE	2938.0	4	56.7	109	1.9	1.0	3.8	2.6	75	6	NA	7575	0.31	
Black & Decker	1066.5	-2	9.0	120	0.8	0.4	5.8	5.9	29	8	3	1485	0.81	
Cincinnati Milacron	160.0	-7	1.1	NM	0.7	NM	NM	-62.4	NM	-10	NA	476	-2.80	
Clark Equipment	302.5	-1	-9.4	NM	NM	NM	NM	-36.6	NM	-3	NA	437	-5.01	
Danaher	211.7**	4	5.2	32	2.4	1.9	4.4	4.6	46	38	5	660	0.57	
Giddings & Lewis	140.8	145	7.3	73	5.2	7.4	7.8	10.3	21	NA	NA	519	1.81	
Kennametal (6)	152.9	-3	5.4	-9	3.5	3.8	5.2	4.9	31	10	77	373	1.11	
Snap-on Tools	226.3**	1	18.5	10	8.2	7.5	11.8	11.4	20	11	2	1469	1.71	
SPX	175.2	12	2.1	NM	1.2	NM	NM	-7.8	NM	-9	NA	256	-1.01	
Stanley Works	502.1	11	17.5	11	3.5	3.5	10.4	13.8	18	4	5	1900	2.31	
(c) SPECIAL MACHINERY GROUP COMPOSITE	10250.2	-4	-36.9	NM	NM	1.4	2.5	0.9	NM	8	13	25218	0.2	
Applied Materials (2)	167.0	16	6.4	51	3.8	2.9	8.5	8.4	23	28	119	649	0.81	
Briggs & Stratton (6)	345.6	12	27.8	17	8.0	7.6	13.1	16.7	15	-2	4	707	3.31	
Caterpillar	2183.0	-18	-132.0	NM	NM	NM	NM	-12.8	NM	6	NA	5714	-5.01	
Deere (2)	1451.8**	1	-19.9	NM	NM	NM	NM	0.1	NM	10	NA	3812	0.01	
Dover	545.7	-1	30.2	3	5.5	5.3	16.5	15.6	19	6	13	2367	2.11	
FMC	933.9	6	54.7	41	5.9	4.4	19.2	61.0	9	NA	17	1605	5.11	
General Signal	411.9	5	16.6	17	4.0	3.6	11.1	13.7	19	-14	9	1248	3.41	
Goulds Pumps	134.9	2	7.8	15	5.8	5.1	13.7	14.7	18	9	11	584	1.51	
Harnischfeger Industries (2)	329.6	-13	10.6	-23	3.2	3.6	10.0	10.3	11	31	14	630	2.01	
Ingersoll-Rand	861.2	0	26.4	-7	3.1	3.3	8.5	9.1	22	9	12	3209	2.81	
Interlake	171.9	-4	-1.9	NM	NM	NM	-2.9	NM	NM	NA	NA	64	-1.01	
Joy Technologies (10)	163.2	-11	4.7	-54	2.9	5.5	4.7	-2.6	NM	NA	NA	406	-0.11	
Pentair	292.8	1	8.7	18	3.0	2.6	9.6	14.8	13	9	12	458	3.41	
Stewart & Stevenson Services (11)	185.6	10	10.1	55	5.4	3.8	13.1	13.1	21	31	24	803	2.31	
Timken	420.9	-4	4.9	31	1.2	0.9	NM	-3.4	NM	5	NA	856	-1.11	
Tyco Laboratories (6)	751.6	-3	23.4	-8	3.1	3.3	8.6	9.6	18	32	15	1765	2.01	
Varity (11)	899.5	0	-115.3	NM	NM	2.1	NA	-51.5	NM	33	67	343	-7.81	
(d) TEXTILES GROUP COMPOSITE	2900.7	8	34.9	NM	1.2	NM	3.7	3.8	29	5	-4	5866	0.8	
Albany International	138.0**	3	0.6	NM	0.5	0.0	3.2	4.7	42	27	-15	456	0.41	
Delta Woodside Industries (6)	168.0	14	8.9	34	5.3	4.5	12.9	12.3	11	67	-15	484	1.61	
DWG (8)	338.9	6	-1.4	NM	NM	NM	NM	-22.6	NM	-2	NA	213	-0.71	
Fieldcrest Cannon	271.4	4	0.6	NM	0.2	NM	5.9	3.0	27	-2	-29	195	0.71	
Guilford Mills (6)	149.3	18	4.8	143	3.2	1.5	8.6	10.6	18	0	-4	368	1.51	
Interface	154.5	2	3.8	128	2.4	1.1	5.6	5.5	21	27	1	226	0.61	
Shaw Industries (6)	403.9	18	8.9	NM	2.2	0.1	10.3	12.4	37	10	17	1689	0.71	
Springs Industries	462.9	8	5.3	274	1.2	0.3	5.4	5.5	21	4	-5	657	1.71	
Unifi (6)	280.3	21	21.9	48	7.8	6.4	12.2	13.3	27	11	30	1577	1.41	
Wickes (11)	533.6	-2	-18.6	NM	NM	NM	NM	-6.4	NA	0	NA	NA	NA	N
16 METALS & MINING														
INDUSTRY COMPOSITE	13009.9	-2	191.0	NM	1.5	0.1	0.1	-3.0	NM	13	22	34636	-0.6	
(a) ALUMINUM GROUP COMPOSITE	5405.7	-6	110.8	-49	2.1	3.8	4.2	2.7	42	13	3	12839	1.0	
Aluminum Co. of America	2251.4	-7	76.0	-22	3.4	4.0	3.4	0.8	NM	7	-17	6519	0.41	
Amox	876.9	-6	12.2	-62	1.4	3.4	3.7	0.4	NM	21	-26	1673	0.11	
Kaiser Aluminum	463.7	-10	8.4	-77	1.8	7.1	11.1	14.5	9	NA	NA	737	1.41	
Maxxam	529.5	-6	0.9	-96	0.2	4.4	NM	7.3	11	NA	249	325	3.51	
Reynolds Metals	1284.2	-6	13.3	-52	1.0	2.0	4.9	4.7	25	21	6	3584	2.31	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN				5-YEAR GROWTH				MARKET VALUE SHARES OUTSTANDING 4/24 \$ MIL	12 MONTHS* EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4/24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
STEEL GROUP COMPOSITE	5517.1	2	-69.6	NM	NM	NM	-10.8	-21.9	NM	7	-5	9489	-3.36	
Allegheny Ludlum	264.4	-1	13.2	6	5.0	4.7	9.4	11.3	25	17	-8	1043	1.27	
Armco	366.4	-11	-30.5	NM	NM	NM	NM	-66.6	NM	5	NA	520	-3.80	
Bethlehem Steel	995.4	-6	-44.6	NM	NM	NM	NM	NM	NM	3	NA	1098	-10.47	
Carpenter Technology (6)	162.8	11	7.2	13	4.5	4.4	6.4	8.1	18	1	45	390	2.66	
Commercial Metals (4)	265.8**	-5	0.4	-71	0.2	0.5	5.2	4.9	26	8	8	254	0.94	
Inland Steel Industries	895.9	8	-27.4	NM	NM	NM	NM	-27.8	NM	-1	NA	716	-9.52	
Lukens	140.1	-10	5.2	-41	3.7	5.6	6.5	8.3	23	10	19	404	2.09	
Nucor	388.4	11	16.2	16	4.2	4.0	7.4	9.4	28	14	8	1861	3.10	
Quanex (2)	124.9	-12	0.9	-62	0.8	1.7	6.1	6.7	27	12	34	318	0.94	
USX-U. S. Steel Group	1169.0	5	-13.0	NM	NM	NM	NM	-12.9	NM	NA	NA	1250	-4.22	
Weirton Steel	269.5	6	-9.1	NM	NM	NM	NM	-23.2	NM	-6	NA	126	-2.55	
Wheeling Pittsburgh	241.8	8	0.0	-94	0.0	0.3	NM	1.5	28	NA	-62	111	0.22	
Worthington Industries (7)	232.7	19	11.6	89	5.0	3.2	11.5	13.7	27	9	5	1398	0.88	
OTHER METALS GROUP COMPOSITE	2087.1	0	149.8	-24	7.2	9.4	6.2	7.4	27	18	21	12309	1.35	
Asarco	458.4	-1	6.9	-14	1.5	1.7	3.6	3.0	25	15	-29	1103	1.09	
Cyprus Minerals	398.4	-5	-5.0	NM	NM	5.1	2.0	0.2	NM	7	17	912	0.05	
Magma Copper	199.9	17	9.7	12	4.9	5.1	NM	-27.7	NM	13	NA	320	-3.75	
Newmont Gold	137.8	-1	29.6	-13	21.5	24.6	16.4	16.5	32	80	22	3893	1.16	
Newmont Mining	157.7	4	44.0	17	27.9	24.7	26.0	50.1	25	NA	-2	2542	1.48	
Phelps Dodge	590.5	-2	53.6	-31	9.1	12.8	11.2	13.2	12	16	43	3029	7.15	
Precision Castparts (9)	144.3	-3	11.0	15	7.6	6.5	NA	15.4	11	34	19	509	2.67	
NONBANK FINANCIAL														
INDUSTRY COMPOSITE	42012.6	2	2986.7	35	7.1	5.3	9.1	12.0	13	9	3	116421	2.76	
FINANCIAL SERVICES GROUP COMPOSITE	19862.9	5	1512.8	41	7.6	5.7	9.3	16.4	12	12	-1	55456	2.64	
Alex. Brown	124.2**	33	16.8	58	13.5	11.4	NA	28.2	5	23	-20	255	3.69	
Alexander & Alexander Services	321.2	-3	20.8	407	6.5	1.2	NM	1.7	NM	3	NA	770	0.16	
Alleghany	397.5	60	12.6	563	3.2	0.8	4.8	4.4	25	8	-15	806	4.86	
American Express	6676.0**	5	249.0	-6	3.7	4.2	NA	10.3	15	8	-10	10683	1.56	
Bank of America (6)	712.1**	14	91.3	58	12.8	9.2	42.6	26.6	7	6	-2	1674	2.54	
Bank of Montreal (8)	246.0	37	5.1	NM	2.1	NM	NA	27.7	22	14	17	3258	1.41	
Bank of New York (3)	202.9**	1	15.6	57	7.7	4.9	10.0	12.5	11	5	-7	524	1.49	
Bank of the West	142.9	11	9.2	8	6.4	6.6	NA	23.0	23	17	21	862	1.07	
Bank of America (A. G.) (10)	268.9**	49	30.9	81	11.5	9.5	22.9	22.7	9	12	7	893	2.35	
Bank of America (quifax)	276.3	9	15.6	NM	5.7	0.3	16.0	19.4	22	30	2	1509	0.83	
Bank of America (Federal Home Loan Mtge. Assn.)	1071.0	2	141.0	11	13.2	12.1	6.4	21.3	12	27	NA	6932	3.16	
Bank of America (First Financial Management)	380.8**	13	22.1	74	5.8	3.8	14.5	9.7	14	76	34	1588	2.01	
Bank of America (Marsh & McLennan)	768.8**	3	101.7	5	13.2	13.0	24.5	30.0	18	11	4	5478	4.28	
Bank of America (Merrill Lynch)	3414.3**	9	277.5	53	8.1	5.8	NA	20.4	7	4	-3	4931	6.80	
Bank of America (PaineWebber Group)	874.3**	19	74.3	135	8.5	4.3	48.1	24.0	5	2	11	782	4.00	
Bank of America (Primerica)	1305.7**	-17	220.8	109	16.9	6.7	15.2	18.1	7	37	28	4169	5.30	
Bank of America (Schwab (Charles))	265.0**	42	29.7	180	11.2	5.7	25.1	29.7	16	6	21	1088	1.75	
Bank of America (Student Loan Marketing Assn.)	714.9	-18	95.1	16	13.3	9.4	6.9	37.1	17	20	23	5704	3.72	
Bank of America (Transamerica)	1700.0**	-3	83.6	46	4.9	3.3	5.5	4.1	31	6	-17	3551	1.48	
INSURANCE GROUP COMPOSITE	18570.4	4	1373.1	23	7.4	6.2	10.2	11.9	11	9	10	53195	4.14	
Bank of America (Aetna Life & Casualty)	4781.6	-2	207.2	51	4.3	2.8	NM	7.8	8	6	-7	4678	5.22	
Bank of America (AFLAC)	934.5	21	42.4	26	4.5	4.4	16.5	17.0	13	15	10	2115	1.93	
Bank of America (American International Group)	4093.6**	7	413.9	10	10.1	9.8	10.4	13.8	11	19	17	17725	7.46	
Bank of America (American National Insurance)	317.4	7	40.0	15	12.6	11.7	NA	7.4	8	4	9	1006	4.96	
Bank of America (Cerkley (W. R.))	142.2	7	14.5	38	10.2	8.0	11.5	12.0	12	11	-5	589	2.82	
Bank of America (Capital Holding)	711.0	13	65.7	17	9.2	8.9	11.7	15.0	10	7	10	2503	5.41	
Bank of America (Conseco)	362.9**	31	36.7	75	10.1	7.6	NA	68.6	9	58	64	710	4.56	
Bank of America (General Re)	849.7	12	146.8	-2	17.3	19.8	15.1	17.1	12	9	20	7751	7.44	
Bank of America (Hartford Steam Boiler)	163.7	6	17.9	-13	11.0	13.4	15.2	17.4	15	15	11	1059	3.39	
Bank of America (Progressive)	387.0**	10	21.9	-15	5.7	7.3	NM	5.7	54	3	-6	1097	0.96	
Bank of America (Provident Life & Accident)	711.0**	3	28.0	-20	3.9	5.1	7.5	8.0	9	7	32	966	2.38	
Bank of America (Reliance Group Holdings)	799.5	-5	13.2	NM	1.6	NM	NM	-48.5	NM	-3	NA	326	-1.45	
Bank of America (St. Paul)	1099.2	8	105.8	26	9.6	8.2	15.3	17.6	7	10	18	2918	9.82	
Bank of America (Archmark)	515.1	8	64.0	9	12.4	12.4	13.9	22.8	12	3	12	2900	4.84	
Bank of America (Transatlantic Holdings)	161.4	3	22.0	20	13.7	11.7	15.5	15.5	10	NA	NA	709	3.25	
Bank of America (Nitrin)	320.0	1	39.4	-13	12.3	14.3	6.6	7.0	13	NA	NA	1723	2.51	
Bank of America (NUM)	647.0	9	59.3	25	9.2	8.0	29.1	14.8	11	0	37	2375	3.24	
Bank of America (SF&G)	941.0	-13	4.0	NM	0.4	NM	NM	-14.9	NM	-10	NA	916	-1.56	
Bank of America (SLife)	361.0	15	17.5	12	4.9	5.0	8.4	7.9	9	1	4	651	4.97	
Bank of America (Washington National)	141.5	2	3.3	NM	2.3	NM	4.3	4.0	15	-7	NA	173	1.18	
Bank of America (Zenith National Insurance)	130.4	-3	9.5	-19	7.3	8.7	15.5	14.8	7	3	NA	304	2.17	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL.	12 MONTH EARNING PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
(c) SAVINGS & LOAN														
GROUP COMPOSITE	3579.3	-21	100.9	339	2.8	0.5	5.7	-2.2	NM	7	-1	7770	-0.42	
Ahmanson (H. F.)	967.2**	-22	23.0	-59	2.4	4.5	9.1	7.6	10	9	-8	1962	1.74	
Coast Savings Financial	172.5**	-29	2.9	1	1.7	1.2	16.5	14.3	4	-12	-8	181	2.68	
Dime Savings Bank of N. Y.	203.9	-19	8.1	417	4.0	0.6	NM	-87.0	NM	-13	NA	110	-9.99	
Glenfed (6)	328.6**	-39	-106.7	NM	NM	0.3	NM	-25.0	NM	5	NA	128	-5.61	
Golden West Financial	530.6	-6	70.0	33	13.2	9.4	9.2	16.9	10	17	5	2463	4.03	
Great Western Financial	877.4**	-15	50.5	-27	5.8	6.7	10.3	12.3	9	5	-10	2312	2.08	
HomeFed	294.9**	-31	30.7	NM	10.4	NM	NA	NM	NM	5	NA	7	-28.07	
Standard Federal Bank	204.2**	-8	22.4	67	11.0	6.0	8.7	13.7	8	10	-3	608	2.38	
18 OFFICE EQUIPMENT & COMPUTERS														
INDUSTRY COMPOSITE	46295.6	5	1765.4	-7	3.8	4.3	2.4	1.6	NM	5	10	169184	0.32	
(a) BUSINESS MACHINES & SERVICES														
GROUP COMPOSITE	3808.7	15	170.3	25	4.5	4.1	12.9	15.4	19	12	4	13238	1.64	
Bell & Howell	152.2	1	-1.9	NM	NM	NM	-0.7	-31.3	NA	-26	NA	NA	-7.47	
CompuCom Systems	158.9	77	1.1	79	0.7	0.7	8.0	16.2	13	32	29	64	0.17	
CUC International (11)	169.5	15	-3.6	NM	NM	5.7	49.8	100.4	52	NA	18	1000	0.56	
Deluxe	385.3	5	48.9	18	12.7	11.3	21.5	24.8	19	12	8	3608	2.27	
HON Industries	158.6	12	7.2	24	4.5	4.1	18.4	22.9	20	1	13	668	1.06	
Intelligent Electronics (11)	600.3	52	9.6	4	1.6	2.3	14.0	13.9	10	183	70	407	1.11	
Merisel	487.1	34	4.1	699	0.9	0.1	15.2	11.5	20	66	-32	272	0.57	
MicroAge(3)	232.5	23	1.2	447	0.5	0.1	7.5	7.2	13	14	7	48	0.87	
Miller (Herman) (7)	198.8	-4	4.2	NM	2.1	NM	6.3	6.3	23	11	-12	436	0.77	
Pitney Bowes	811.5	0	71.1	5	8.8	8.4	13.7	16.1	18	15	7	5219	3.64	
Reynolds & Reynolds (3)	153.3	-1	8.7	65	5.7	3.4	7.9	11.4	15	7	1	432	2.71	
Standard Register	168.5	-2	8.7	46	5.2	3.5	9.3	10.5	14	6	-6	509	1.23	
Wallace Computer Services (5)	132.2	8	11.0	12	8.3	8.0	9.6	10.6	16	15	8	575	1.64	
(b) COMPUTERS & PERIPHERALS														
GROUP COMPOSITE	37313.7	3	1161.5	-15	3.1	3.8	0.1	-1.5	NM	4	7	111596	-0.42	
AM International (5)	160.5	-23	-6.5	NM	NM	0.5	NM	-7.5	NM	-7	NA	64	-0.28	
Amdahl	497.9	12	4.4	-62	0.9	2.6	NM	-0.2	NM	22	-28	1835	0.02	
Apple Computer (3)	1716.0	7	135.1	3	7.9	8.2	13.3	17.1	21	21	20	6695	2.68	
AST Research (6)	241.6	34	16.7	0	6.9	9.3	20.5	21.6	7	25	20	498	2.21	
Commodore International (6)	194.6	-21	4.1	-61	2.1	4.3	NM	15.2	9	22	-16	441	1.57	
Compaq Computer	783.0	-19	45.3	-60	5.8	11.8	4.1	3.2	37	61	21	2284	0.73	
Conner Peripherals	441.1	16	24.7	-30	5.6	9.2	8.7	11.5	13	106	50	1060	1.40	
Control Data	365.7	-10	7.7	-21	2.1	2.4	-1.7	-2.6	NM	-19	NA	494	-0.26	
Cray Research	165.1	15	3.9	-26	2.4	3.7	13.5	14.7	9	8	-2	944	4.11	
Data General (3)	273.8	-15	-55.3	NM	NM	6.0	1.2	0.6	NM	-8	NA	286	0.00	
Dell Computer (11)	285.7	71	15.4	79	5.4	5.2	16.5	18.6	19	104	31	931	1.40	
Digital Equipment (6)	3252.5	-8	-294.1	NM	NM	3.3	NM	-17.0	NM	7	NA	5717	-10.32	
Everex Systems (5)	133.1	45	1.2	NM	0.9	NM	NM	-33.2	NM	64	NA	159	-1.31	
Hewlett-Packard (2)	3863.0	13	306.0	49	7.9	6.0	11.4	11.3	23	10	8	19852	3.40	
International Business Machines	14037.0	3	595.0	7	4.2	4.1	-1.0	-1.4	NM	2	NA	50321	-0.88	
Quantum (9)	345.5	19	17.2	-14	5.0	6.9	18.2	16.7	15	15	35	641	1.02	
Seagate Technology (6)	779.9	15	40.7	61	5.2	3.7	2.5	0.6	NM	27	-14	971	0.02	
Silicon Graphics (6)	184.4	39	12.2	289	6.6	2.4	8.4	10.9	20	51	65	721	0.80	
Storage Technology	333.7	-8	12.5	-7	3.7	3.7	10.8	10.4	21	39	-3	1875	2.24	
Sun Microsystems (6)	952.2	12	61.4	5	6.5	6.9	14.5	14.1	14	61	44	2602	1.92	
Tandem Computers (3)	502.9	3	8.8	-51	1.8	3.7	-4.7	-6.5	NM	18	-10	1371	-0.65	
Tandy (6)	1085.2**	7	35.1	-4	3.2	3.6	9.4	9.3	14	7	5	2225	2.11	
Unisys	2009.5**	-2	48.3	NM	2.4	NM	NM	NM	NM	-26	NA	1698	-8.41	
Wang Laboratories (6)	460.8	-6	-6.3	NM	NM	NM	NM	NM	NM	-45	NA	679	-1.91	
Xerox	4249.0**	1	128.0	10	3.0	2.8	8.7	8.6	19	-3	0	7230	4.02	
(c) COMPUTER SOFTWARE & SERVICES														
GROUP COMPOSITE	5173.1	18	433.7	8	8.4	9.1	16.0	19.5	31	23	19	44350	1.30	
Automatic Data Processing (6)	545.3**	11	79.8	14	14.6	14.2	19.9	21.6	25	9	18	6375	1.71	
Comdisco (3)	534.0**	-8	-35.0	NM	NM	4.0	7.9	3.5	23	12	3	532	0.51	
Electronic Data Systems	1995.0**	24	133.1	9	6.7	7.6	17.9	22.0	23	27	17	5789	1.21	
Intergraph	277.2	-3	2.9	-85	1.1	6.9	7.0	7.2	15	8	2	824	1.11	
Lotus Development	227.1	30	20.8	216	9.1	3.8	13.8	15.5	24	21	-9	1330	1.31	
Microsoft (6)	680.9	40	178.8	44	26.3	25.4	31.9	31.8	34	57	55	19902	3.21	
Novell (2)	205.0	52	52.2	71	25.4	22.6	27.1	27.5	43	71	55	7595	1.21	
Oracle Systems (7)	289.6	7	16.8	39	5.8	4.5	NA	9.8	49	65	NA	1815	0.21	
Safeguard Scientifics	189.7	67	3.0	-33	1.6	3.9	9.1	10.8	7	21	10	67	1.91	
Western Digital (6)	229.3	-7	-18.6	NM	NM	NM	NM	-81.6	NM	15	NA	120	-3.51	
19 PAPER & FOREST PRODUCTS														
INDUSTRY COMPOSITE	19758.3	4	451.7	-3	2.3	2.5	2.8	3.5	44	6	2	57954	0.91	
(a) FOREST PRODUCTS														
GROUP COMPOSITE	7143.3	5	108.6	441	1.5	0.3	-0.1	-0.9	NM	2	NA	19153	-0.21	
Boise Cascade	953.9	-4	-42.9	NM	NM	NM	NM	-10.6	NM	-5	NA	859	-3.21	
Georgia-Pacific	2830.0	2	5.0	NM	0.2	NM	-0.9	-2.3	NM	3	NA	6109	-0.71	
Louisiana-Pacific	475.5	31	36.0	NM	7.6	NM	6.6	8.4	25	5	-3	2537	2.71	

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL.	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
ope & Talbot	127.1	-4	0.1	-95	0.1	1.6	NM	-3.9	NM	12	NA	228	-0.62	
eyerhaeuser	2195.7	6	86.6	81	3.9	2.3	NM	-1.8	NM	1	NA	7433	-0.31	
illamette Industries	561.0	22	23.7	335	4.2	1.2	5.4	6.4	31	15	-6	1988	2.52	
POWER														
GROUP COMPOSITE	12615.1	4	343.2	-23	2.7	3.7	4.2	5.3	28	7	3	38801	1.51	
owater	372.8	15	-29.7	NM	NM	5.2	NM	-0.5	NM	14	-3	818	-0.11	
ampion International	1200.3	3	-3.6	NM	NM	1.3	2.4	-0.2	NM	7	-36	2660	-0.05	
esapeake	210.1	6	2.5	5	1.2	1.2	4.6	4.9	32	9	-4	500	0.75	
nsolidated Papers	217.3	-5	15.4	-40	7.1	11.2	6.5	8.5	21	13	4	1727	1.86	
rt Howard	276.3	1	-17.4	NM	NM	NM	NM	NM	NA	-57	NA	NA	-16.49	
taffelter (P. H.)	138.7	-7	14.9	-27	10.8	13.8	13.4	15.8	18	13	16	1219	3.11	
nternational Paper	3400.0	10	104.0	-19	3.1	4.1	5.7	6.5	22	10	7	8396	3.32	
imes River Corp. of Virginia	1136.4	-3	-10.7	NM	NM	3.4	2.3	0.2	NM	NA	NA	1763	0.04	
emberly-Clark	1739.7	4	136.4	13	7.8	7.2	15.0	20.8	16	8	16	8624	3.28	
ead	1088.2	-1	17.7	32	1.6	1.2	4.8	5.4	28	7	-11	2231	1.36	
statch	334.5	14	15.9	65	4.7	3.3	4.7	6.7	23	13	-2	1412	2.14	
ott Paper	1200.1	2	45.2	54	3.8	2.5	NM	-2.7	NM	9	NA	3318	-0.74	
tion Camp	761.0	5	25.4	-38	3.3	5.7	5.1	5.6	34	8	2	3673	1.57	
estvaco (2)	539.8	-6	27.1	64	5.0	2.9	6.1	8.6	16	10	6	2460	2.26	
PUBLISHING & BROADCASTING														
GROUP COMPOSITE	13357.8	5	572.8	35	4.3	3.3	5.2	6.1	48	12	-2	80301	1.10	
BROADCASTING														
GROUP COMPOSITE	3181.5	8	126.4	26	4.0	3.4	5.3	8.6	49	12	NA	22818	1.41	
merican TV & Communications	323.3	9	47.9	36	14.8	11.8	11.6	23.5	36	38	32	6343	1.60	
pital Cities/ABC	1095.4	-13	41.7	-29	3.8	4.7	8.8	9.8	21	14	16	7504	21.35	
IS	1082.0	42	18.6	79	1.7	1.4	NM	-29.1	NM	-5	NA	2511	-5.99	
aylord Entertainment	124.2	7	-2.8	NM	NM	NM	3.5	4.1	NM	NA	NA	1287	0.24	
ultimedia	126.0	6	10.4	16	8.2	7.5	21.0	NM	21	NA	38	964	1.34	
acom	430.6	6	10.5	NM	2.4	NM	-1.1	-4.6	NM	5	NA	4208	-0.27	
PUBLISHING														
GROUP COMPOSITE	10176.3	4	446.4	38	4.4	3.3	5.1	5.5	47	12	-6	57483	1.01	
ommer Clearing House	204.0	-6	19.1	-25	9.4	11.8	10.0	11.2	27	6	-8	662	0.71	
w Jones	436.1	5	28.4	58	6.5	4.3	5.2	5.8	35	16	-17	2857	0.81	
n & Bradstreet	1108.4	-1	98.2	0	8.9	8.8	23.7	23.4	19	8	5	9726	2.84	
nnett	793.1	1	55.5	11	7.0	6.4	11.2	19.9	23	4	4	6972	2.10	
ight-Ridder	555.4	2	25.0	58	4.5	2.9	9.5	12.3	23	5	3	3295	2.68	
raw-Hill	454.8	6	14.2	12	3.1	3.0	10.9	15.0	21	3	-4	3145	3.06	
edia General	141.7	-3	2.7	15	1.9	1.6	NM	-30.6	NM	-8	NA	476	-2.37	
eredith (6)	180.3	-5	5.1	-6	2.8	2.9	5.8	5.9	22	1	-10	417	1.19	
w York Times	440.4	6	13.9	173	3.2	1.2	4.9	5.2	43	9	-21	2410	0.72	
ader's Digest Association (6)	718.6	12	90.6	12	12.6	12.7	26.1	31.3	23	NA	NA	5275	1.91	
trips (E. W.)	313.6	4	15.8	218	5.0	1.6	7.9	11.2	26	7	3	1938	1.01	
ne Warner	3007.0	6	3.0	NM	0.1	NM	-0.2	-7.7	NM	56	NA	9654	-8.54	
nes Mirror	867.8**	2	36.6	57	4.2	2.7	4.5	5.1	49	8	-23	4627	0.74	
bune	471.4	0	15.4	-27	3.3	4.5	9.1	23.6	25	-19	-6	2952	1.85	
ashington Post	329.1	4	19.7	57	6.0	4.0	13.2	13.6	22	15	3	2727	10.60	
estern Publishing Group (11)	154.4**	23	3.1	NM	2.0	NM	8.7	6.4	27	41	-13	352	0.62	
SERVICE INDUSTRIES														
GROUP COMPOSITE	17308.9	11	623.3	9	3.6	3.7	8.7	11.8	26	14	12	61241	1.18	
INSTRUCTION & ENGINEERING														
GROUP COMPOSITE	3781.8	-3	74.7	6	2.0	1.8	11.0	12.9	21	6	32	7334	1.67	
ogee Enterprises (10)	142.4	-3	1.6	-52	1.1	2.3	6.3	7.5	17	15	16	145	0.63	
SS (6)	124.2	-1	0.4	-75	0.3	1.4	5.4	4.5	28	12	15	129	0.36	
&G	654.8	3	18.1	10	2.8	2.6	21.0	19.7	16	12	11	1367	2.97	
or (2)	1596.5	-9	28.8	12	1.8	1.5	13.3	14.6	23	6	36	3405	1.86	
iter Wheeler	495.5**	1	11.3	17	2.3	2.0	7.0	8.4	21	5	35	947	1.27	
obs Engineering Group (3)	270.1	-3	8.1	61	3.0	1.8	21.5	21.5	26	34	72	629	1.02	
rrison Knudsen	498.3**	10	6.4	-29	1.3	2.0	6.9	8.5	21	-3	-6	712	2.33	
INDUSTRIAL DISTRIBUTION														
GROUP COMPOSITE	4969.8	13	162.4	13	3.3	3.3	9.9	11.2	24	10	13	13463	1.29	
them Electronics	126.1	25	7.6	34	6.0	5.6	15.9	15.8	21	25	50	514	2.07	
ow Electronics	378.7	60	9.3	218	2.4	1.2	6.9	4.5	47	16	NA	319	0.34	
net (6)	425.6	-2	12.4	-15	2.9	3.4	5.7	6.0	19	5	24	918	1.38	
arings (6)	208.1	3	0.4	-5	0.2	0.2	6.4	2.9	39	1	23	155	0.56	
er Scientific International	195.8	13	4.9	75	2.5	1.6	NA	NA	NA	NA	NA	339	NA	
nuine Parts	873.2	8	46.8	9	5.4	5.3	18.3	18.8	18	9	12	3719	1.85	
ity Petroleum (11)	291.7**	-22	3.2	-65	1.1	2.5	NM	-14.9	NM	16	NA	159	-0.98	
zinger (W. W.)	532.3	12	28.3	0	5.3	5.9	14.0	14.8	22	9	13	2725	2.38	
man	205.5	6	3.9	1	1.9	2.0	7.1	8.4	11	8	-8	180	0.93	
rshall Industries (7)	142.6	2	4.8	32	3.4	2.6	10.3	10.4	17	26	41	286	2.03	
ice Depot	433.3	33	9.4	64	2.2	1.8	6.2	5.9	69	105	26	1207	0.61	

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Golf/Schools

JOIN JOHNNY AT PEBBLE BEACH!

Tee It Up With The "STRAIGHTEST SHOOTER" In History
3 days, 4 nights of **GOLF, GOLF, GOLF!**
Luxury accommodations at The Lodge at Pebble Beach
The Ultimate Gift, The Ultimate Incentive
The Ultimate Golf Vacation

Johnny Miller
ULTIMATE GOLF EXPERIENCE

20 Golfers per Camp

For Info: (408) 293-4653

Office Supplies/Equipment

America's Lowest Priced Office Supplies Direct to You

WHOLESALE
Company

Letter Size Pads Canary	<i>Speed</i> 11 pt. manila folders Letter size, 1/3 cut Order No: 811CPMCP \$2 ⁹⁹ Box/100	3M Data cartridge, 60MB, 600' length Order No: DC600ATHM \$18 ⁹⁹ Ea.	Panasonic 9-Pin Dot Matrix Printer Order No: KXP1180POA \$148 ⁹⁹
-------------------------------	---	---	---

You simply won't find lower prices on brand name office supplies than at Wholesale Supply Company. Over 9,600 different items, same day shipping, and all at prices you have to see to believe. So call now for your free catalog.

1-800-962-9162

Ad C code 0085

Computers

BUY FACTORY DIRECT AND SAVE!

ALLUR
TM

**386SX/20MHz
NOTEBOOK**

\$1,499



- 60MB Fast IDE Hard Drive
- 2MB RAM Memory Standard Upgradeable to 8MB
- 1.44MB 3.5" Floppy Drive
- VGA 640 x 480 resolution Backlit LCD display screen with 32 gray scales.
- 1 Parallel Port, 1 Serial Port
- 1 Mouseport for PS/2™ Mouse
- Microsoft Windows 3.0
- Microsoft DOS 5.0 with DOS Shell & QBasic
- Weight: 6.9 lbs.
- Enhanced rechargeable NiCad Battery Pack: 3 hours of operation before recharging
- Universal AC Power Adapter (95V to 264V)

- 30 day money-back guarantee
- Lifetime toll-free technical support
- 1-year warranty on parts and labor
- COD, leasing and net terms available

CALL AND ORDER TODAY!
1-800-488-3095
ALL MAJOR CREDIT CARDS ACCEPTED

Golf/Schools

LOWER YOUR GOLF HANDICAP... BUILD YOUR OWN PUTTING GREEN!

Step by step illustrated instructions for easy construction of a real grass practice green in your own backyard! Developed by a PGA golf course professional to put like a regulation green. Not artificial!

Complete Instruction Manual \$39.95

...all you need to build your own green!

Check or Money Order to:
BERJES CO.
P.O. Box 34277-0277
Omaha, NE 68134

Business Opportunities

PERSONALIZED BOOKS FOR KIDS

- Earn Money From Home
- Make Money With Your Computer
- Print Personalized Children's Books
- Superb Quality • Unbeatable Price

DEALERSHIPS \$995

Best Personalized Books, Inc.
3107 Chapel Downs Drive
Dallas, Texas 75229 • (214) 357-6800

Health/Fitness

Executive BackChair

Engineered for customized orthopedic support to prevent and relieve back pain

- Built-in adjustable lumbar support
- Adjustable neck rest
- Forward-tilt feature



BackSaver FREE Color Catalog
1-800-251-2225 or write
53 Jeffrey Ave., Dept. BWE, Holliston, MA 01746

SWIM AT HOME IN AN ENDLESS POOL!

Now you can enjoy all the benefits of a full size pool in a space only 8' wide and 15' long. Swim in place against a smooth adjustable current. Experience the best form of exercise in the comfort and privacy of your own home. Easy installation. Affordable at \$12,500!

For information call:
1-800-732-8660
200 E. Dutton's Mill Rd
Aston, PA 19014



Time Counters

When you positively, absolutely have to keep the count in rugged conditions or in high and low temperatures, you can't beat a quiet, dependable

ELECTRO-MECHANICAL HOUR METER.

ENM Company
5617 Northwest Highway
Chicago, IL 60646-6135
Phone 312/775-8400 • Fax 312/775-5968



Business Opportunities

Personally Combine Environmental Awareness with Eco-Touristic Business Opportunity offering Guaranteed Return
Associate(s) needed for exclusive Manuel Antonio Beach Resort Development / Manageable US \$ amount



Free Associate(s) Beach Villa for 2 wks / yr
FREE Information 800-461-9409

Catalogs

OSHA MUST-SIGNS LOCKOUTS - FIRST AID KITS

Call or write for **FREE** catalog
Discount Business Equipment
& Supplies

INTEREX - Division

176 Newington Rd. W. Hartford, CT 06110
Call Toll Free 1-800-225-5910

Financial Services

SOCIAL SECURITY
Check Your Social Security Account For Errors And Receive Your 12 Page Social Security Account Earnings And Benefit Statement. Call Toll Free 1-800-666-0999
Name: [Name] Address: [Address]

Real Estate

The New Estate

POST AND BEAM HOMES: Designs range from 18th century classics to your own vision of comfort and security.
Eastern Timber Homes, Inc.
Box 359 • Laverett, MA 01054
Providing:
• Finest materials including native wood
• Skilled artisans and consultants
• WEATHERTIGHT shell home package
FREE INFORMATION: Call TOLL FREE 1-800-742-523

Cable TV

CABLE TV DESCRAMBLERS, CONVERTERS, ACCESSORIES
Name Brands. Lowest Prices. Best Service.
For FREE 16-page color catalog call
CABLE READY (800) 234-1000
COMPANY

FREE CATALOG! 1-800-345-892
JERROLD HAMLIN OAK ETC
CABLE TV DESCRAMBLERS

• Special Dealer Prices! • Compare Our Low Retail Prices! • Orders From Stock Shipped Immediately!
• Guaranteed Warranties & Prices!
• All Major Credit Cards
PACIFIC CABLE CO., INC.
7325 1/2 Reseda, Dept 855 Reseda, CA 91335
For catalog, orders & info. 1-800-345-8927

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Computer Software

Capture your company's
knowledge before someone
else does!

ACQUIRE™

Knowledge Acquisition Software for
Expert Systems PC ver \$995
Fax 604/479-0764 • Call 479-8646

Legal Speeding!

From 1 into second. Squeal the tires. Smash
down on the gas. And then, uh, sink over to
the shoulder when you're caught. On second
thought, maybe you'd rather speed up your
wheels calls the legal way—with GeoQuery. The
Macintosh software that plots your customers
names and addresses on an interactive map.
Call 800-541-0181 for GeoQuery details. And
fill in more sales, without getting pulled over.

Travel/Vacations

SOUTHWEST

The magazine for lovers of the
Southwest. Breathtaking photos,
travel tips. No ads. Vol. I, \$8.00

Publishing Concepts Corp.
3243 Highway 61 East
Luttrell, TN. 37779

Education/Instruction

COLLEGE DEGREE

BACHELORS • MASTERS • DOCTORATE

For Work, Life and Academic
Experience • No Classroom
Attendance Required

Call (800) 423-3244
or send detailed resume
for Free Evaluation

Pacific Western University
600 N Sepulveda Blvd Dept 170
Los Angeles, CA 90049 U.S.A.

Business Services

RESEARCH REPORTS

3,278 academic topics available!
and \$2.00 for the 272-page catalog
custom-written reports also available

RESEARCH ASSISTANCE
11322 Idaho Ave., #206BF,
Los Angeles, CA 90025
Toll Free Hotline: 800-351-0222
(California: 310-477-8226)

NEED A NEWSLETTER?

Our one-stop design, printing and
mailing service makes it easy
hundreds of satisfied customers nationwide
see info/prices: (800) 359-5993

JUST DESIGN, PRINTING, POSTAGE, DATA EXPRESSING

INCORPORATE Tax Free Nevada

Privacy, anonymity, asset protection (beats
it!). Even if you are already incorporated,
eat benefits for you. Also office and
prices. FREE literature—call or write
Lighthouse Assoc., Inc., in business for over
40 decades 2533 N Carson St., Carson
City, NV 89706 1-800-648-0966.

Executive Gifts

**GREAT ENCOURAGEMENT
FOR SHIPWRIGHTS!**

All gentlemen shipwrights who
want to provide for themselves
amusement and satisfaction
through the traditional craft of
ship modeling, an opportunity
now offers to acquire, through
the minimal cost of one Colonial
Dollar (\$1.00) a catalogue of
fine ship model kits.

Send \$1.00 for a catalog to:
MODEL EXPO, Inc.
Dept. BW52B, PO Box 1000
Mt. Pocono, PA 18344

Corporate Gifts

UNIQUE-WATER POWERED DESK CLOCK!

RUNS FOR WEEKS ON ONE FILL!

- Date, Time, Seconds
- Any Logo/Design Imprintable

GREAT GIFT—QUANTITY PRICES
Send \$19.95 + \$3.00 P&H to
EXCALIBUR SALES CORP.
3000 Windsor Way • Tallahassee, FL 32312
Florida residents add 7% sales tax. Dealer inquiries invited

**JAMEE WEST &
LOGO
WATCH**

**24 HRS.
advertisement**

Can you imagine a full color
company logo or any artistic
design on our elegant watch?
Anything is possible! Just
send us your company logo,
artwork or photo and we will
transform it on our exquisite
watch. Deluxe/Standard
watch with precision quartz
movements, leather strap
plus 1 year warranty.
Please send us \$15.95
(Lmt. 2 sample/company)
JAMEE WEST@LOGO WATCH
9816 GARDEN GROVE BLVD.
GARDEN GROVE, CA 92644
FAX 714-534-4673
1-800-635-2633

Wine Cellars

WINE CELLARS BY Vinotemp™

28 HANDMADE WOOD MODELS • 114 TO 3400 BOTTLES • MADE IN U.S.A.
FACTORY DIRECT TO YOU VISA — M/C — AMX
DISCOVER



MODEL	DESCRIPTION	APPRX CAPACITY	SUGG RETAIL	YOUR COST
440	Upright	400	\$2495	\$1695
700	Upright	600	2995	1995
296	Credenza	280	2695	1795
114	Compact	114	1395	995
230	Two Doors	230	1795	1195
700FUR	Fur Vault	8 to 10 Furs	2995	1995
700HH	His and Hers	300 bottles 4/5 Furs	3995	2995
Designers' non wood model 60 bottle glass door			899	659

Vinotemp Int'l • 134 W 131st St (PO Box 6161E) • Los Angeles, CA 90061
CALL 800/777-VINO (777-8466) or 213/749-9500 FAX 213/749-9518
IMMEDIATE SHIPMENT ON MOST MODELS. WE WILL NOT BE UNDERSOLD • CALL US FIRST

International Marketing

RUSSIAN OPPORTUNITIES

Russian businessmen in newly opened
territory are seeking partnership
in business and manufacturing.
Exclusive list with 100's of top contacts
available.

GLOBAL ACCESS CORP.
1-800-949-3012

Sales Promotion/Marketing

Sales Leads & Mailing Lists

- 9 Million U.S. Businesses -
Telephone Verified with Contact Name and Employee Size
- 1.7 Million High Income Americans • 84 Million Consumers Residents
- 2.1 Million Unemployed Businessmen • Opportunity Seekers

FREE Catalog - Call (402) 331-7169 or write
American Business Lists
P.O. Box 27347, Dept 01-062 • Omaha, NE 68127

Corporate Gifts

MUST LIQUIDATE!

Less Than 27c on the Dollar!

MITA® FAX Machine Model TC-200

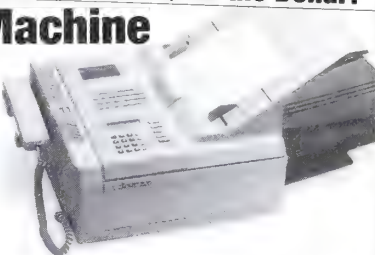
Mita® is an office products com-
pany that makes expensive -
office quality goods.

Now you can get professional
quality goods at less than dis-
count store prices!

**AT THIS LOW PRICE,
OUT THEY GO! CALL NOW!**

Maximum features for minimum dollars!

- **Automatic Dialing** and Re-dial-
ing: 20 numbers for one-touch
dialing, 100 numbers for speed
dialing!
- **15 Second Transmission Speed**
- **Automatic paper cutter**
- **Transmission** can be:
 - reserved during receiving
and started immediately
when reception has been
completed
 - started on receiving party
control
 - automatically started at a
pre-set time
 - confidential
- **Reception** can be:
 - automatic
 - scheduled for a set time



- stored in memory for later
print-out
- controlled by remote
unit
- screened by a pass-
word to prevent
junkfax
- Regular telephone and
handset
- Voice response for select
reception
- Date, time and transmis-
sion stamps
- **Group 2/3 Compatible**
- Copier features for
single or multiple
copies on thermal paper!
- **90 Day Limited
Factory Warranty!**

***Mfr. List
\$1895.00
OUT THEY GO!
\$499**
Item #H3991-8441
S/H \$12 Each

COMB

AUTHORIZED LIQUIDATORS®

1-800-522-3035

Segment #4128286

COMB CORP., Authorized Liquidator

720 Anderson Avenue, St. Cloud, MN 56395
To order by mail, include item #, name, address, day-
time phone, and check or money order. Please state
Segment Number 4128286. Sorry, no C.O.D.'s. Add
Shipping/Handling for each item. Add 6 1/2% sales tax
for MN delivery.



FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Corporate Gifts

IMAGE BUILDERS

PROMOTE YOUR BUSINESS...
EVERYDAY LOW PRICES ON...



IMPRINTED COFFEE MUGS AS LOW AS \$1.29

32 OZ SPORT BOTTLES AS LOW AS \$1.19

EMBROIDERED CAPS AS LOW AS \$4.45

YOUR LOGO HERE

CHOOSE FROM
HUNDREDS OF ITEMS.
CALL FOR FREE CATALOG

1-800-792-2277
FAX 1-510-786-1111
THE CORPORATE CHOICE

Corporate Gifts

100% Cotton/Your Logo! — Better Than Lacoste or Ralph Lauren!



Our 100% Cotton, American Made polo shirts, custom embroidered with your logo are such good quality, we unequivocally and unconditionally guarantee them for an indefinite period of time! Free shipping for international orders. For a price list and catalogue please call:

1-800-847-4478
Fax 1-718-782-4614

The Queensboro Shirt Company
Dept BW25, 119 N 11th St., Greenpoint, NY 11211



Actual Size

Ambassador Lapel Flags®

Your Logo with any 2-flag mix
• 24K Gold finished • Full colors
• 100% U.S.A. -made

We'll custom-make any emblem for you!
Delivery: 14 business days Worldwide

TME Co., Inc. 101 Bel Air Drive
New Milford, CT 06776, U.S.A.
(800) 535-5255 • Fax (203) 354-2786

Menswear/Fashion

MEN'S WIDE SHOES

EE-EEEEEE, SIZES 5-13
Extra width for men who need it
Excellent variety, styling and quality
Send for **FREE CATALOG**



The Widest Selection of the Widest Shoes Anywhere!

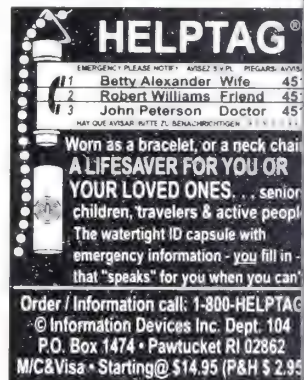
HITCHCOCK SHOES, INC
Dept. 55E Hingham, MA 02043

International Study Programs

LEARN RUSSIAN on the **BLACK SEA (SOCHI)** or **MOSCOW**: Mos. St. U. Certif of Compt. Begin-Adv. Live w/Russ Families & Russ. Students Lectures by prominent people in Russ. pol & bus life.
6/5-8/8: Sochi: Incl 7d. tour in Russ.
6/5-8/15: Sochi: Incl 14d. " " "
7/7-8/15: Moscow: Incl 7d. " " "

7/7-8/1: COURSE FOR BUS. PEOPLE
130 hrs class work. Vacation & study in mod a/c Sochi resort hotel w/class & lect halls. Lect: see above. Tennis, pvt beach, pool, riding. Optional: 7/14d tour after course. Assist w/bus contacts & info. Virtus Ltd.: day, evng & wknd.
212-289-3120 or 1-800-274-9121

Security



HELPTAG®
EMERGENCY PLEASE NOTE: HELPTAG IS A LIFE SAVER FOR YOU OR YOUR LOVED ONES. . . senior children, travelers & active people. The watertight ID capsule with emergency information - you fill in that "speaks" for you when you can't.
Worn as a bracelet, or a neck chain.
Order / Information call: 1-800-HELPTAG
© Information Devices Inc. Dept. 104
P.O. Box 1474 • Pawtucket RI 02862
M/C Visa • Starting @ \$14.95 (P&H \$ 2.95)



EXCLUSIVE MOUNTAIN RANGE
like new, lots of details, riv vu's,
original landscaping, a must-see,
willing to negotiate.

© David Muench 1991

Prime Real Estate. For years, The Nature Conservancy has purchased large tracts of it so that endangered species can flourish there. Now, as partners in the public television series Nature, we're helping provide another place where wildlife can flourish. To learn more about these and all of our activities, call 1-800-628-6860.

NATURE &



Nature appears Sundays
on PBS

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL.	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL.	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
Premier Industrial (7)	156.3	3	18.5	19	11.8	10.3	22.5	23.6	25	1	17	1925	1.32	
Staples (11)	186.2	103	5.9	NM	3.2	0.4	5.5	5.8	55	NA	NA	465	0.48	
United Stationers (4)	260.4	7	3.4	48	1.3	1.0	5.2	6.1	18	9	-7	206	0.72	
Inivar (10)	409.9	29	1.3	-64	0.3	1.1	NM	-3.3	NM	24	55	216	-0.29	
Villcoxon & Gibbs	144.0	0	2.3	58	1.6	1.0	3.8	2.3	51	13	-24	132	0.19	
POLLUTION CONTROL														
GROUP COMPOSITE	3329.7	12	260.8	7	7.8	8.2	7.2	11.5	36	19	8	26911	0.84	
Air & Water Technologies (2)	154.4	-3	0.2	NM	0.1	NM	NM	-10.4	NM	47	NA	463	-1.05	
Crown-Ferris Industries (3)	782.0	2	38.7	-33	4.9	7.5	2.6	2.3	NM	9	-8	3317	0.16	
Chemical Waste Management	373.3	22	29.9	25	8.0	7.9	8.5	11.6	34	23	6	3634	0.52	
Waste Management	2020.1	16	192.1	16	9.5	9.5	8.8	15.3	31	22	12	19498	1.28	
PRINTING & ADVERTISING														
GROUP COMPOSITE	1674.0	10	53.1	19	3.2	2.9	10.8	13.5	20	13	12	6999	2.44	
Dymo-System (3)	182.6	11	0.6	-61	0.3	1.0	17.9	21.9	19	17	28	247	1.01	
Quanta	152.5	10	7.3	41	4.8	3.7	10.8	13.4	15	15	11	448	2.31	
Donnelley (R. R.) & Sons	938.2	8	35.5	18	3.8	3.5	9.1	12.2	20	11	4	4117	2.71	
Interpublic Group	400.7**	13	9.6	22	2.4	2.2	15.4	16.4	22	20	16	2187	2.63	
OTHER SERVICES														
GROUP COMPOSITE	3553.6	29	72.4	4	2.0	2.5	8.1	10.6	21	18	8	6533	1.06	
Delta Services	164.7**	6	1.1	-19	0.7	0.9	NA	4.3	23	49	21	187	0.66	
American Bldg. Maintenance (2)	182.6	3	2.1	15	1.2	1.0	11.9	12.4	13	5	15	145	2.78	
DI	204.1	4	0.6	114	0.3	0.2	NM	-6.9	NM	22	NA	163	-0.37	
Handelman (8)	306.3	55	12.1	184	3.9	2.1	8.7	12.9	14	16	2	453	0.99	
iaCom	244.4	115	1.7	41	0.7	1.1	3.8	4.5	21	23	28	88	0.53	
WP	1036.1	46	1.3	-90	0.1	1.9	8.7	9.9	12	43	24	603	1.21	
elly Services	377.4	14	6.2	-27	1.6	2.6	10.2	10.2	29	20	4	1069	1.21	
Mid Atlantic Medical Services	135.4	57	3.5	23	2.6	3.3	32.8	41.6	15	174	72	157	0.73	
listen	218.9**	11	3.6	42	1.6	1.3	10.6	13.8	32	18	6	504	1.00	
inkerton's	159.4	13	1.2	-17	0.8	1.0	10.1	10.8	14	NA	NA	183	1.58	
safety-Kleen	173.9	14	12.1	6	7.0	7.5	8.0	11.3	31	29	10	1630	0.91	
Service Corp. International	200.7	31	25.2	34	12.5	12.2	7.4	13.0	15	2	5	1247	1.62	
Wackenhut	149.6	3	1.7	10	1.1	1.1	11.4	18.4	13	2	21	106	2.04	
TELECOMMUNICATIONS														
INDUSTRY COMPOSITE	47069.3	2	3987.3	26	8.5	6.9	7.3	10.8	22	3	3	244025	1.93	
EQUIPMENT & SERVICES														
GROUP COMPOSITE	20601.7	2	1004.5	28	4.9	3.9	4.6	5.4	71	7	63	81127	0.55	
American Telephone & Telegraph	15375.0	1	883.0	17	5.7	5.0	3.9	4.3	NM	3	16	56793	0.41	
Communications Satellite	127.9	1	15.5	-16	12.1	14.6	7.8	11.7	11	1	15	733	3.58	
N Broadcasting†	123.9	24	-37.2	NM	NM	NM	-0.1	NM	NM	NA	NA	3778	-2.96	
icCaw Cellular Communications	374.7	28	-118.8	NM	NM	NM	NM	-17.2	NM	107	NA	4967	-1.73	
ci Communications	2224.0	10	141.0	8	6.3	6.4	10.9	18.0	16	20	44	8677	2.04	
acific Telecom	166.2	-9	21.1	16	12.7	10.0	10.5	15.4	10	NA	18	888	2.34	
Print	2210.0	2	99.9	20	4.5	3.9	8.8	15.1	14	10	16	5290	1.75	
TELEPHONE COMPANIES														
GROUP COMPOSITE	26467.5	3	2982.8	25	11.3	9.3	8.1	12.4	16	2	-1	162898	2.73	
ltel	498.4	14	48.8	0	9.8	11.1	10.0	16.2	17	17	13	3346	2.30	
eritech	2690.8	2	337.0	19	12.5	10.8	10.0	15.1	14	1	3	16631	4.59	
all Atlantic	3019.2	1	366.8	6	12.1	11.5	10.1	17.3	13	-1	2	17377	3.46	
allSouth	3738.7	6	460.9	15	12.3	11.4	8.2	11.7	15	3	-1	23641	3.23	
ntel	294.3	2	9.4	98	3.2	1.7	6.9	9.9	30	NA	-13	3533	1.37	
ncinnati Bell	297.9	8	14.5	-7	4.9	5.7	6.0	6.4	28	7	-2	1070	0.61	
TE	4823.0	3	427.0	117	8.9	4.2	8.4	15.9	16	6	3	28556	1.95	
ynex	3237.9	-4	336.2	25	10.4	8.0	6.2	7.3	23	0	-13	15356	3.29	
acific Telesis Group	2474.0	3	331.0	24	13.4	11.0	8.6	13.7	16	-1	2	17093	2.73	
ochester Telephone	191.7	20	15.2	17	7.9	8.1	8.1	13.2	13	14	5	991	2.39	
outhern New England Telecomms. 404.7**	3	40.1	7	9.9	9.5	6.6	10.9	14	3	-1	1902	2.10		
outhwestern Bell	2287.1	7	261.6	17	11.4	10.4	8.6	13.5	16	2	2	18797	3.97	
S West	2509.8	2	334.4	17	13.3	11.7	5.6	6.3	24	6	-7	14604	1.49	
TRANSPORTATION														
INDUSTRY COMPOSITE	28243.4	9	180.2	NM	0.6	NM	0.1	-2.3	NM	-3	NA	63446	-0.47	
AIRLINES														
GROUP COMPOSITE	11917.0	18	-299.1	NM	NM	NM	-3.3	-11.1	NM	3	NA	12662	-3.75	
Alaska Air Group	258.2	5	-15.7	NM	NM	NM	3.9	-0.8	NM	8	-21	235	-0.17	
merica West Airlines	337.1	-5	-10.0	NM	NM	NM	NM	NM	NM	-11	NA	11	-8.18	
MR	3510.0	27	20.0	NM	0.6	NM	NM	-0.6	NM	10	NA	4454	-0.38	
elta Air Lines (6)	2814.6	22	-151.6	NM	NM	NM	NM	-17.8	NM	8	NA	2885	-6.58	
outhwest Airlines	373.9	32	13.5	NM	3.6	NM	5.6	7.7	33	5	2	1573	1.13	
AL	2972.0	16	-92.3	NM	NM	NM	NM	-16.7	NM	-9	NA	2904	-11.27	
SAir Group	1651.3	4	-63.0	NM	NM	NM	NM	-22.5	NM	-2	NA	601	-5.40	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4-24 \$ MIL	12 MONTH EARNIN PER SHAR
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P-E 4-24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
(b) RAILROADS														
GROUP COMPOSITE	8085.5	3	534.8	55	6.6	4.4	0.8	-1.1	NM	-8	NA	37135	-0.10	
Burlington Northern	1185.0	5	80.0	NM	6.8	NM	NM	-17.4	NM	-22	NA	3866	-3.03	
Chicago & North Western	242.6	-2	5.0	127	2.1	0.9	NM	NM	NA	NA	NA	14	NA	
Consolidated Rail	798.0	6	38.0	111	4.8	2.4	NM	-8.5	NM	1	NA	3664	-4.9	
CSX	2086.0	3	62.0	9	3.0	2.8	NM	-2.2	NM	-8	NA	6347	-0.6	
Illinois Central	138.7	1	21.1	38	15.2	11.1	12.2	23.7	13	NA	NA	963	1.7	
Kansas City Southern Industries	175.1**	23	14.6	52	8.3	6.7	8.8	12.4	16	3	7	776	2.3	
Norfolk Southern	1098.2**	3	138.7	39	12.6	9.4	1.1	1.7	NM	-3	-23	8826	0.5	
Santa Fe Pacific	616.9	9	30.4	76	4.9	3.1	7.2	10.6	22	-30	NA	2360	0.6	
Union Pacific	1745.0	0	145.0	9	8.3	7.6	3.0	1.8	NM	4	-32	10320	0.3	
(c) TRANSPORTATION SERVICES														
GROUP COMPOSITE	4125.5	2	-158.3	NM	NM	NM	1.7	1.1	NM	8	-15	5594	0.2	
Air Express International	155.5	8	3.2	36	2.1	1.7	17.9	22.4	13	35	23	188	1.9	
Airborne Freight	359.9	13	1.1	-77	0.3	1.4	5.9	8.2	19	27	19	430	1.2	
Federal Express (7)	1889.5	0	-193.4	NM	NM	NM	NM	-6.9	NM	11	-39	2408	-2.2	
PHH (8)	482.1	-1	13.3	11	2.8	2.5	NA	11.5	13	8	8	606	2.8	
Ryder System	1238.5	3	17.4	NM	1.4	NM	5.7	5.8	26	2	-22	1962	1.0	
(d) TRUCKING & SHIPPING														
GROUP COMPOSITE	4115.4	6	102.8	78	2.5	1.5	6.0	9.5	20	5	5	8054	1.7	
Alexander & Baldwin	170.0**	4	16.5	21	9.7	8.3	8.1	13.0	12	7	5	1110	2.0	
American President	660.4**	6	17.8	98	2.7	1.4	9.5	14.8	8	-4	27	534	4.3	
Carolina Freight	172.1	3	-0.6	NM	NM	NM	2.6	1.7	48	1	-41	107	0.3	
Consolidated Freightways	990.6	-5	0.3	NM	0.0	NM	NM	-7.7	NM	-5	NA	645	-1.1	
GATX	231.9**	10	15.8	-16	6.8	8.9	7.7	10.9	8	28	26	504	3.4	
Hunt (J. B.) Transport Services	201.3	23	6.3	50	3.1	2.6	8.6	14.6	28	17	5	897	0.9	
Preston	139.3	3	0.3	NM	0.2	NM	NM	-2.8	NM	-5	NA	40	-0.4	
Roadway Services	802.7	20	30.7	65	3.8	2.8	NA	15.7	22	6	17	3008	3.5	
TNT Freightways	181.0	17	2.7	137	1.5	0.7	7.3	NA	NA	NA	NA	311	N	
Yellow Freight System	566.0	1	13.1	134	2.3	1.0	6.2	7.2	26	5	-12	899	1.2	
24 UTILITIES & POWER														
INDUSTRY COMPOSITE	45748.5	2	4391.3	8	9.6	9.0	6.3	9.8	15	3	-2	192416	2.0	
(a) ELECTRIC, WATER & COGENERATION														
GROUP COMPOSITE	36538.7	4	3728.1	10	10.2	9.6	6.2	9.8	15	3	-4	175613	2.0	
Allegheny Power System	622.6	4	71.9	11	11.6	10.8	7.3	11.9	11	4	-3	2298	3.7	
American Electric Power	1297.0	3	143.6	-10	11.1	12.6	7.4	11.4	12	1	1	5836	2.6	
Atlantic Energy	197.8	13	32.4	178	16.4	6.7	8.5	13.9	11	12	0	1123	4.1	
Baltimore Gas & Electric	671.4	13	59.3	44	8.8	6.9	6.9	9.7	13	6	-11	2671	2.4	
Boston Edison	343.5	8	13.8	63	4.0	2.7	7.8	10.4	12	0	-5	1004	2.0	
Carolina Power & Light	658.3	3	94.2	4	14.3	14.2	8.3	14.9	11	0	2	4199	4.6	
Centor Energy	591.8	-3	38.3	-24	6.5	8.3	5.3	7.9	11	-2	-12	2558	1.6	
Central & South West	685.0	6	63.0	2	9.2	9.6	7.7	13.2	13	4	0	4966	2.0	
Central Maine Power	246.6	8	21.5	33	8.7	7.1	8.5	12.1	10	9	2	619	1.9	
Cincinnati Gas & Electric	446.5	1	67.1	-20	15.0	19.0	8.1	10.4	12	12	6	2033	2.9	
Cipsco	185.5	0	13.4	18	7.2	6.1	6.8	12.2	13	1	1	929	2.1	
CMS Energy	967.0	-1	53.0	NM	5.5	NM	NM	-0.5	NM	-11	NA	1247	-0.2	
Commonwealth Edison	1422.6	8	67.3	NM	4.7	0.4	1.6	1.4	83	-2	-57	6699	0.3	
Commonwealth Energy System	257.9	1	20.4	13	7.9	7.0	5.8	6.8	17	2	-14	357	2.0	
Delmarva Power & Light	222.3	4	34.8	57	15.7	10.4	6.8	12.1	13	3	-12	1099	1.6	
Detroit Edison	895.8	4	156.1	17	17.4	15.4	9.7	19.7	9	-2	5	4924	3.8	
Dominion Resources	944.3**	4	106.8	-9	11.3	13.0	7.8	11.6	13	7	0	5778	2.8	
DPL	292.9	1	53.6	-13	18.3	21.3	NA	10.3	15	7	2	1656	1.6	
DQE	298.1	3	36.4	1	12.2	12.5	6.5	12.1	11	-3	7	1514	2.5	
Duke Power	981.3	10	106.4	-23	10.8	15.4	7.8	12.3	14	6	5	6806	2.4	
Florida Progress	463.5	2	34.3	-8	7.4	8.1	6.6	10.8	14	NA	-2	2453	3.1	
FPL Group	1093.4	-6	84.6	3	7.7	7.1	7.3	11.3	15	2	-5	5934	2.2	
General Public Utilities	892.4	9	82.1	-40	9.2	16.7	5.8	7.1	12	5	5	2743	2.0	
Hawaiian Electric Industries	259.4	-10	15.7	9	6.0	5.0	5.8	9.7	16	13	-2	898	2.4	
Illinois Power	383.5	2	14.9	68	3.9	2.4	4.6	5.8	20	-5	-25	1674	1.1	
LG&E Energy	204.9	5	15.6	-37	7.6	12.6	6.3	11.0	13	6	2	952	3.4	
Midwest Resources	276.5	4	17.1	-20	6.2	8.1	6.0	9.4	16	24	-4	1081	1.2	
Montana Power	270.3**	3	41.6	-3	15.4	16.3	8.2	12.1	12	3	9	1235	1.5	
New England Electric System	574.7	0	67.0	-12	11.7	13.3	6.9	11.8	12	6	0	1973	2.6	
New York State Electric & Gas	489.8	10	76.4	4	15.6	16.5	6.4	10.7	11	2	4	1712	2.3	
Niagara Mohawk Power	1033.9	4	102.5	-7	9.9	11.1	NA	9.2	13	-2	7	2518	1.4	
Northeast Utilities	762.7	9	86.7	8	11.4	11.4	6.9	13.0	11	0	-4	2817	2.1	
Northern States Power	563.7	-2	44.3	-21	7.9	9.7	6.4	11.2	14	4	-1	2470	2.8	
Ohio Edison	587.8	-1	75.0	1	12.8	12.6	6.8	10.2	12	2	-7	2956	1.6	
Oklahoma Gas & Electric	273.2	0	3.5	-73	1.3	4.7	7.6	13.4	12	0	5	1516	3.0	
Orange & Rockland Utilities	240.1	19	12.0	-7	5.0	6.4	7.7	11.5	11	5	1	460	3.0	
Pacific Gas & Electric	2419.9	7	276.4	98	11.4	6.1	8.5	14.0	12	2	2	12997	2.4	
Pennsylvania Power & Light	756.8	5	113.0	2	14.9	15.3	7.3	13.4	12	4	6	3753	4.0	
Philadelphia Electric	1079.9	7	88.4	-39	8.2	14.3	7.4	10.6	13	2	-28	5556	1.8	

Footnotes on page 135

CORPORATE SCOREBOARD

COMPANY	SALES		PROFITS		RETURN					5-YEAR GROWTH			MARKET VALUE SHARES OUTSTANDING 4/24 \$ MIL	12 MONTHS' EARNINGS PER SHARE
	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	1ST QUARTER 1992 \$ MIL	CHANGE FROM 1991 %	MARGINS		ON INVESTED CAPITAL %	ON COMMON EQUITY %	P/E 4/24	COMMON EQUITY %	EARNINGS PER SHARE %			
					1ST QUARTER 1992 %	1ST QUARTER 1991 %								
Pinnacle West Capital	347.3	5	16.1	20	4.6	4.0	NM	-25.5	NM	-10	NA	1512	-3.89	
Portland General	237.7	2	29.6	-15	12.5	15.0	-0.6	-3.8	NM	-5	NA	710	-0.54	
Potomac Electric Power	331.2	6	9.5	36	2.9	2.2	6.0	11.6	13	8	-4	2667	1.85	
PSI Resources	273.0	-4	27.5	-23	10.1	12.5	2.5	1.8	84	29	-20	869	0.19	
Public Service Co. of Colorado	526.9	-4	46.2	2	8.8	8.2	8.9	13.4	11	5	3	1492	2.48	
Public Service Co. of New Mexico	236.8	-5	16.2	22	6.8	5.3	3.8	2.2	29	-9	-35	486	0.40	
Public Service Enterprise Group	1514.1	7	193.6	14	12.8	12.0	7.4	12.0	10	6	4	5951	2.51	
Puget Sound Power & Light	280.2	2	48.0	-15	17.1	20.5	7.9	12.2	12	4	3	1403	2.07	
Rochester Gas & Electric	257.7	5	28.4	17	11.0	9.9	NA	9.2	13	-2	-1	706	1.70	
San Diego Gas & Electric	471.3	5	54.3	2	11.5	11.9	9.1	14.6	12	2	2	2454	3.54	
San Juan	297.4	0	35.8	-11	12.0	13.5	7.0	12.8	12	4	4	1611	3.26	
SCEcorp	1714.4	3	167.1	-8	9.7	10.9	7.5	12.1	13	3	1	9128	3.14	
Southern	1808.0	1	212.1	29	11.7	9.2	7.5	13.2	11	3	-2	10417	2.93	
Southern Public Service (4)	173.0	4	20.6	-15	11.9	14.4	8.8	14.6	13	2	4	1284	2.41	
Southern Energy	262.6	4	27.3	0	10.4	10.8	8.3	16.3	15	3	8	2127	2.55	
Texas Utilities	1057.2	-3	115.8	-25	11.0	14.1	NM	-7.1	NM	8	NA	8007	-2.14	
Union Electric	430.9	-2	31.8	-9	7.4	8.0	8.3	14.4	11	2	0	3345	2.98	
United Illuminating	176.8	3	13.7	-6	7.8	8.5	4.9	9.4	12	-9	-13	502	3.08	
UtiliCorp United	366.0	16	28.6	0	7.8	9.0	6.7	9.8	12	25	6	900	2.12	
Wheelabrator Technologies	321.4	23	26.6	36	8.3	7.5	8.7	14.9	18	38	33	2566	1.53	
Wisconsin Energy	422.1	1	55.4	-1	13.1	13.3	8.0	13.0	14	7	3	2602	2.81	
WPL Holdings	178.0	1	19.4	-2	10.9	11.2	8.4	14.1	13	3	2	862	2.41	
AS, OIL & TRANSMISSION GROUP COMPOSITE	9209.7	-6	663.2	2	7.2	6.7	7.3	9.5	16	4	13	16803	1.61	
Brooklyn Union Gas (3)	433.3	8	58.5	-6	13.5	15.4	5.8	9.1	14	9	2	816	2.06	
Eastern Enterprises	356.6	8	31.0	12	8.7	8.4	5.3	6.5	19	3	10	609	1.44	
El Paso Natural Gas	174.4	-17	28.4	-1	16.3	13.7	8.7	10.8	NA	-3	NA	723	NA	
Enron	3341.0	-7	115.8	6	3.5	3.0	7.6	13.1	17	10	95	3884	2.21	
Enserch	777.2	-4	34.4	-16	4.4	5.1	NA	-0.3	NM	-2	50	890	0.02	
Equitable Resources	245.2	8	26.1	-6	10.6	12.2	8.2	11.2	12	6	7	778	3.00	
Exxon Jersey Resources (3)	174.6	25	21.0	36	12.0	11.1	7.2	10.4	14	24	0	263	1.35	
Exxon	578.8	-10	39.9	-15	6.9	7.3	8.1	14.2	11	6	9	1125	3.48	
Exxon (4)	264.6	-5	23.3	-17	8.8	10.0	NA	9.1	13	1	11	418	1.18	
Exxonhandle Eastern	681.1	-19	60.6	49	8.9	4.9	6.8	7.9	15	7	NA	1609	0.97	
Exxon Natural Gas (2)	172.9	11	24.5	43	14.2	11.0	7.9	11.7	14	14	3	391	2.31	
Exxonstar	225.8	-4	29.9	-9	13.3	13.9	8.1	12.0	13	3	14	786	1.54	
Exxonat	420.0	-14	42.9	-5	10.2	9.3	7.1	7.3	20	2	1	1514	1.77	
ExxonGI	242.8	-8	26.7	-3	11.0	10.4	7.4	7.4	19	10	-8	467	0.93	
Exxon Washington Gas Light (3)	305.0	6	43.2	11	14.2	13.5	8.8	11.7	13	6	1	661	2.52	
Exxonfor	233.3	-5	17.4	-13	7.5	8.1	6.0	8.0	18	4	-3	336	1.29	
Exxon Williams	583.2	-4	39.5	-8	6.8	7.0	7.0	8.9	16	2	48	1534	2.24	

PHABETICAL LIST OF COMPANIES

Number following each company name identifies the Scoreboard category under which it is listed

A Amax 16a Amdahl 18b American Building 21e Amerasia Hess 11b America West 23a American Brands 6e American Cyanamid 4 American Electric 24a American Express 17a American Greetings 14d American Home 12b American Intl. Group 17b American Maize 10b American Medical 12c American National 17b American President 23d American Stores 10c AT&T 22a American TV 20a Ameritech 22b Ames Dept. Stores 8 Ametek 9c Amgen 12b Amoco 11b AMP 9d AMR 23a Analog Devices 9d Anheuser-Busch 6c Anthem Electronics 21b Apogee Enterprises 21a	Apple Computer 18b Applied Materials 15c Arbor Drugs 12a Arco Chemical 4 Arco 16b Armstrong World 6b Arrow Electronics 21b Arvin Industries 2b Asarco 16c Ashland Oil 11b AST Research 18b Atlantic Energy 24a Atlantic Richfield 11b Automatic Data 18c AutoZone 8 Avery Dennison 15a Avnet 21b Avon Products 6d	B Baker (J.) 8 Baker-Hughes 11c Ball 7a Baltimore G&E 24a Banc One 3b Bancorp Hawaii 3d Bandag 2c Bank of Boston 3a Bank of New York 3a BankAmerica 3d	Bankers Trust 3a Banta 21d Bardon (C.R.) 12d Barnes Group 15a Barnett Banks 3c Baroid 11c Bausch & Lomb 12d Baxter International 12d Bear Stearns 17a Bearings 21b Beckman Instruments 9c Becton, Dickinson 12d Bell & Howell 18a Bell Atlantic 22b BellSouth 22b Berns 7b Bergen Brunswig 12a Berkley (W.R.) 17b Best Buy 6b Bethlehem Steel 16b Betz Laboratories 4 Beverly Enterprises 12c Big B 12a Bindley Western Inds. 12a Black & Decker 15b Block (H&R) 17a Blockbuster Ent. 14b Blount 15a Boatmen's Bancshares 3b Bob Evans Farms 14a	C Cabot 4 Calsonic World 14c Caldar 8 Campbell Soup 10b Capital Cities/ABC 20a Capital Holding 17b Carlisle 15a Carnival Cruise Lines 14d Carolina Freight 23d Carolina Power 24a Carpenter Technology 16b	Carter Hawley Hale 8 Casey's General 10c Caterpillar 15c CBS 20a CDI 21e Centel 22b Centene Energy 24a Centex 13b Central & South West 24a Central Maine Power 24a Comdisco 18c Comerica 3b Commerce Clearing 20b Commercial Metals 16b Commodore Intl. 18b Commonwealth Ed. 24a Commonwealth Energy 24a Comstar 22a Compaq Computer 18b CompuCom Systems 18a ConAgra 10b Conner Peripherals 18b Consecro 17b Cons. Freightways 23d Consolidated Papers 19b Consolidated Rail 23b Consolidated Stores 8 Constellation International 7a Continental Bank 3b Continental Medical 12c Control Data 18b	Cooper Industries 9a Cooper Tire & Rubber 2c Coors (Adolph) 6c CoreStates Financial 3a Corning 15a Costco Wholesale 8 CPC International 10b CPI 14d Crane 15a Crawford 17a Cray Research 18b Crestar Financial 3c Crown Central Petroleum 11b Crown Cork & Seal 7a CRSS 21a Crystal Brands 6a CSX 23b CUC International 18a Culbro 6e Cummins Engine 2b Curcic-Burns Food 10b Cyprus Minerals 16c
--	--	---	---	---	--	--

Continued on p. 154

The number following each company name identifies the Scoreboard category under which it is listed

Washington Gas Light
Washington National
Washington Post **20b**
Waste Management **2**
Weirton Steel **16b**
Weis Markets **10c**
Wellman **4**
Wells Fargo **3d**
Wendy's International
Western Digital **18c**
Western Publishing **2**
Westinghouse Electric
Westmark Int'l **12d**
West ac **19b**
Weyerhaeuser **19a**
Wheelabrator Techs
Wheeling-Pittsburgh **1**
Whirlpool **6b**
Whitman **5**
Wickes **15d**
Wico **24b**
Willamette Industries
Willcox & Gibbs **21b**
Wills **24ab**
Winn-Dixie Stores **10**
Winn-Dixie Energy **24**
Witco **4**
Woollworth **8**
Worthington Inds **16**
WPL Holdings **24a**
WPL (Wm.) Jr. **1c**

XYZ

Xerox **18b**
Yellow Freight **23d**
York International **13**
Zenith Electronics **6b**
Zenith Nat'l Inc. **17b**

*Complimentary
million dollar feeling
with breakfast.*

*Mornings start off nicer thanks
to a billion dollars worth of
improvements at ITT Sheraton. You'll
find guaranteed 30-minute room
service, new hotels, guestrooms,
lobbies, restaurants and a whole new
standard of service. For reservations,
call your travel professional or
800-325-3535. We spent a billion to
make you feel like a million.*



ITT Sheraton

ITT SHERATON HOTELS OF THE MID-ATLANTIC: DISTRICT OF COLUMBIA: Sheraton City Centre Hotel and Towers • Sheraton Washington Hotel •
The Carlton • MARYLAND: Sheraton Inner Harbor Hotel, Baltimore • Sheraton International Hotel at BWI Airport • Sheraton Greenbelt Hotel, New Carrollton •
Sheraton Ocean City Resort and Conference Center • Sheraton Baltimore North Hotel, Towson • PENNSYLVANIA: Sheraton Plaza Hotel, King of Prussia •
Sheraton Valley Forge Hotel, King of Prussia • Sheraton Bucks County Hotel, Langhorne • Sheraton Society Hill Hotel, Philadelphia •
Sheraton University City Hotel, Philadelphia • Sheraton Station Square Hotel, Pittsburgh • VIRGINIA: Sheraton Crystal City Hotel, Arlington •
Sheraton National Hotel, Arlington • Sheraton Reston Hotel • Sheraton Premiere at Tysons Corner •

RUNNING FOR COVERAGE IN ANXIOUS TIMES



Free-lance writer Andrea Eagan had no health insurance when she was diagnosed with colon cancer last year. Such news would seemingly make her uninsurable, but she was lucky—she lives in one of the few states, New York, where she could sign up for Blue Cross/Blue Shield under open enrollment.

Other people aren't so fortunate. As premiums soar and benefits get chipped away, health insurance continues to move beyond the reach of many. Joining a big company or marrying someone with a

good job is still the best way to get comprehensive, affordable health coverage. But if you've been laid off, are self-employed, or work for a small business without a health plan, it doesn't mean you have to forgo insurance and pray you never get sick.

You do have options, ranging from health maintenance organizations to high-risk pools. Individual major-medical plans tend to be steep—at least \$3,000 a year for a family of four, with a \$1,000 deductible. But if you're healthy, you can lower the

cost more than half by getting the highest deductibles to cover only catastrophic ailments. Much harder is finding coverage if you're sick. But there, too, options exist.

ONE FEE. The trend is toward more cost-conscious managed-care programs. With an HMO, you pay one fee—\$123 a month on average for individuals—for comprehensive care from a network of health-care providers (table). The big advantage is that your rates won't rise with greater use of the HMO. But you're restricted to its doctors and facilities.

A preferred provider organization (PPO) gives you option of using a network "preferred" doctors and hospitals, often for a small co-payment per visit. But you also pay more and go to doctors outside the network. Rates for this type of health care are only slightly higher than those for an HMO.

Managed-care plans differ from conventional insurance which works on a fee-for-service basis. That means the insurer decides what's a reasonable fee for each service and pays you some portion

Index to Companies

Index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

Partners 124	Compaq Computer 132
America 128, 129	ComputerLand 129
ance 64	Concord Confections 56
oducts &	Conner Peripherals 122
micals 102	Cross & Trecker 100
Signal 113	Credit Suisse 114
Computer	
ems 129	D
Entertainment 131	Dallas Cowboys 99
ican Express 44	Dean Witter Reynolds 22, 114
can National Bank of	Dell Computer 128, 132
118	Delta Air Lines 132
al 56	Digital Equipment 124, 129, 132
Research 124	Dow Chemical 132
Partners 64	Du Pont 102
58, 124	
r Daniels Midland 51	E
iated Credit	Eli Lilly 120, 132
aus 52	Equifax 52
128	Exhibition Relations 131
ic Richfield 51	Export-Import Bank of
x Systems 124	Japan 66
acific Group 50	Exxon 132
Nacional de	F
co 104	Fadal Engineering 101
One 132	Family Channel 55
rs Life &	Federated Department
alty 156	Stores 132
rs Trust 114, 132	FileNet 124
of America 42	First International 128
Brothers 64	First Interstate 158
earnings 114	Ford 50, 58, 132
computer 130	Foreign Candy 56
120	Furman Selz 50, 102
Entertainment	
ision 55, 131	G
100, 132	GE 61, 102
Cascade 42	Genentech 120
Consulting 102	General Dynamics 58
n Castrol 64	Giddings & Lewis 100, 102
	GM 100, 102, 132
	Goldman Sachs 132
illar 100	H
or 120	Hachette 64
an & Cutler 116	Hallmark Cards 104
Manhattan 114	Hambrecht & Quist 120, 122
let 50	Hershey Foods 64
n 132	Hewlett-Packard 122, 124
120	Honda 50
Hotels	Howell Group 38
ational 131	Hughes Aircraft 61
's 104	
r 50, 102, 132	I
38, 44	IBM 122, 124, 128, 129, 132
s Francais 64	Icos 120
ati Milacron 100,	ImmuLogic 120
	InfoCorp 128
x Odeon 131	Intel 128, 129
City 42	Italcementi 64
k 118	ITS 122
b 132	
r Impresit 63	
ia Pictures 131	

K	Kempinski 64
Key Federal Savings	
Bank 118	
Kmart 56, 132	
L	Ladenburg Thalmann 55, 122
Leaf 56	
Lindner Dividend Fund 158	
Link Resources 128	
Lloyds Bank 64	
Lockheed 42	
Lotus Development 38	
Loung Hwa Electronics 130	
LTV 116	
Lufthansa 64	
M	MAC Group/Gemini 118
Macy (R.H.) 132	
Manville 116	
Matra 64	
MCA 124	
McDonald's 131	
McGraw-Hill 35, 36	
Merck 120	
Meridien 64	
Merrill Lynch 114	
Microsoft 128, 130	
Midland Bank 64	
Mitac International 128	
Mobil 132	
Morgan Grenfell Italia 64	
Morgan (J.P.) 114	
Morgan Stanley 114, 132	
Mori Seiki 101	
Mr. Bulky Treats & Gifts 56	
MTV 55	
N	National Football
	League 99
	National Intergroup 158
	NBC 55
	NEC 128
	Nestle 64
	Nickelodeon 55
	Nintendo 130
	Nissan 50, 58
	Nomura Securities 114
	Northgate Computer 124
O	Occidental Petroleum 132
	Okuma Machinery
	Works 100
	Oppenheimer 120
P	Packard Bell
	Electronics 128
	PaineWebber 38, 158, 132
	Parallan Computer 124
	Paribas 64
	Paul Kagan Associates 55
	Penney (J.C.) 42, 131
	PepsiCo 51
	Philadelphia Cheiving
	Gum 56
	Polythermal 113
	Pratt & Whitney 100
	Premier Anesthesia 122
	Pro-Line 47
	Pyramid Life 156
Q	Quantum 122
R	Ralston Purina 64
	Random House 58
	Roth & Strong 102
	Regional Financial
	Associates 132
	Renault 64
	Rolm 124
S	Salomon Brothers 61, 114
	San Francisco 49ers 99
	Schiess 100
	Seagate Technology 122
	Siemens 124
	Signet Bank 118
	Societe Generale 114
	Source Perrier 64
	Sun Microsystems 122, 124, 128
	Susquehanna Investment
	Group 114
T	Tandy 128
	Tatung 128
	TECO Information
	Systems 128
	Televisa 104
	Texaco 132
	Time Warner 124
	Towers Perrin 118
	Toyota 50
	Transco Energy 158
	Trans Union 52
	TRW 52
	Twentieth Century-Fox 131
	Twinhead 128
U	UBS Securities 114
	Union Bank of
	Switzerland 114
	United
	Microelectronics 130
	Univision Holdings 104
	Unocal 42
V	Variety 158
	Viacom International 55
	Video Hits One 55
	Volvo 64
	Voyager 58
W	Wal-Mart 132
	Walt Disney 124, 131
	Wang 128
	Warner Bros. 131
	Wells Fargo 158
	Weyerhaeuser 102
	Wrigley's 56
X	Xerox 128
	X-ray Optical Systems 113
Y	Yamazaki Mazak 101

An Experience They'll Never Forget!

The Skip Barber Racing School is the ultimate vehicle for you to develop, motivate and reward your employees, as well as entertain your customers, through an adventure-based driving experience.

IT'S FUN



Formula Ford Racing School

Each component of driving a "Fast Lap" is broken down and studied in one-, two- or three-day courses. The skills of braking, downshifting and finding the fast line around a race track all come together as students progress through the classroom and on-track exercises.

IT'S SAFE



BMW Advanced Driving School

You'll be taken through each phase of high performance driving, from theory to practical application. The emphasis is placed on street driving technique, not racing. By experiencing a vehicle's limits under exciting but controlled situations, students become better, safer drivers.

BMW Traveling School



With classes offered at more than 20 different race tracks coast-to-coast—plus Hawaii—there's bound to be a Skip Barber Racing School near you. If you would like us to

literally come to your doorstep we can do that too with our Traveling BMW School

IT'S EXHILARATING

Corporate Entertainment/Meetings

Let us custom design a program to meet your organization's exact needs: arranging for lodging, catering, hospitality tents and professional photographers are part of the long list of services we can provide our corporate clients.



CALL US TODAY TO DISCUSS THE SPECIFICS OF YOUR NEXT CORPORATE FUNCTION!



Bob Piché, Director of Marketing

Route 7 / Canaan, CT 06018 / (800) 221-1131

Corporate Drive Video Brochure Now Available

Introducing the ALR Ranger M486 Series

When you unleash the 486™ power of the ALR Ranger, you'll be astounded by this notebook's sheer speed and portability. You may even wonder how something this powerful (yet concealable) can be legal. Still, if you're tired of notebooks that force you to compromise power for portability, and you're determined to get the most for your money, then the ALR Ranger M486 is the only notebook for you.

Featuring the processing power of an **advanced i486SX™** or **i486DX™** processor and a standard 4-MB of RAM (expandable to 16-MB), the Ranger M is actually *more* powerful than most desktop office PCs.

8.5" Diagonal Backlit Passive Matrix Color Screen Offering 640 x 480 Resolution and Up To 64 Colors



9" Diagonal Backlit LCD Color Screen Offering 32 Shades of Gray and a Full Size Touch Keyboard



Prices start at \$4,395



Because it factors in both charge and discharge times, ALR's advanced "Gas Gauge" is the most accurate in the industry.

monitoring software - can run up to **five hours off a single charge.**

Of course, all this power becomes useless if you run out of battery power. That's why the Ranger M - with its processor controlled Nickel Metal Hydride battery pack and super accurate power

It's So Powerful, You May Have To Register It With Your Local Authorities.

**20-MHz
i486SX
Upgradeable
Notebook
\$3,395**



What Sets the Ranger M 486 Apart...

An advanced modular design makes it easy for you to plug in more powerful CPUs whenever your processing needs increase.



i486DX CPU 25-MHz (fastest)



i486SX CPU 25-MHz (faster)

i486SX CPU 20-MHz (fast)



And with the Ranger's two unique internal I/O slots, you can install...



Data Compression Module
Double the size of your hard disk



FAX/Modem
9600 baud FAX
2400 baud (Modem)



SCSI Interface
Perfect for an external CD ROM, hard disk or tape back-up

Try finding another notebook with that much expandability! For office use, try the **ALR Ranger Station**. Just slide the Ranger M486 in, and instantly gain extra storage and three full-length ISA expansion slots.

Sure, you could pay more for other notebooks. But you'd get less. And *that* really would be a crime. For more information, call:

1-800-444-4ALR

ALR
Advanced Logic Research, Inc.

9401 Jeronimo
Irvine, CA 92718
TEL: (714) 581-6770
FAX: (714) 581-9240

Available at these nationwide locations:

ComputerLand **Connecting Point** **111** **EN**
COMPUTER CENTERS

BUSINESSLAND

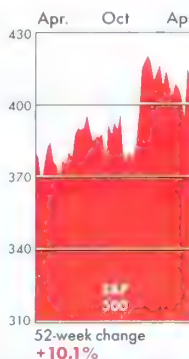
ALR Power Parts Resellers

Investment Figures of the Week

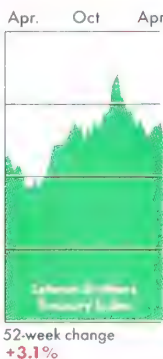
MENTARY

generally upbeat week in the financial markets. The stock market opened on May 1, as fears of a spread unrest followed the Los Angeles riots. But investors regained their confidence on the trading day, May 4. The Dow Jones industrial average climbed points to close at a record. Bond prices rallied on May 4, despite mixed economic signals. A decline in new-home sales. Commerce Dept. estimate the economy grew at a healthy 2% annual rate in the first

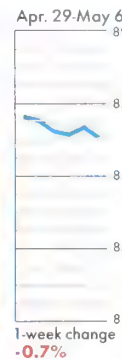
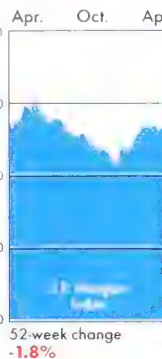
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	3369.4	1.1	15.0
COMPANIES (Russell 1000)	220.5	1.4	11.5
COMPANIES (Russell 2000)	199.1	2.9	14.0
COMPANIES (Russell 3000)	234.9	1.5	11.7

FOREIGN STOCKS	Latest	% change Week	% change 52-week
DOW JONES (FINANCIAL TIMES 100)	2698.7	1.3	6.9
NIKKEI INDEX	17,878.7	2.0	-32.0
TSE COMPOSITE	3361.3	0.1	-3.5

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.69%	3.80%	5.7%
30-YEAR TREASURY BOND YIELD	7.97%	8.07%	8.2%
S&P 500 DIVIDEND YIELD	2.96%	3.11%	3.2%
S&P 500 PRICE/EARNINGS RATIO	25.5	25.1	18.0

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	403.9	403.0	Positive
Stocks above 26-week moving average	55.2%	50.2%	Negative
Speculative sentiment: Put/call ratio	0.34	0.42	Neutral
Insider sentiment: Vickers sell/buy ratio	2.50	2.56	Neutral

INDUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC

4-WEEK LEADERS

	% change 4-week	% change 52-week
WELL EQUIPMENT AND SERVICES	11.1	-10.2
NEW CENTER BANKS	10.6	26.8
COMMOBILES	10.5	18.5
PACKING	10.3	32.5
HOSPITAL MANAGEMENT	10.3	-35.5

Strongest stock in group

	% change 4-week	% change 52-week	Price
BAKER HUGHES	19.0	-26.5	21 1/8
CITICORP	18.8	19.7	19
FORD MOTOR	12.2	31.0	44 7/8
YELLOW FREIGHT SYSTEM	13.1	2.0	31 1/4
NATIONAL MEDICAL ENTERPRISES	21.4	-34.4	15 5/8

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
COMMUNICATIONS EQUIPMENT	-11.2	5.8
MANUFACTURED HOUSING	-10.3	13.3
SPECIALTY APPAREL RETAILERS	-9.1	7.3
REBUILDING	-8.9	15.3
AIRLINES	-6.0	-8.8

Weakest stock in group

	% change 4-week	% change 52-week	Price
NORTHERN TELECOM	-11.9	8.7	38 7/8
FLEETWOOD ENTERPRISES	-11.9	17.9	37
LIMITED	-14.4	-12.4	23 3/4
PHM	-21.6	26.1	21 3/4
USAIR GROUP	-21.5	-28.9	13 1/4

MUTUAL FUNDS

MORNINGSTAR INC

LEADERS

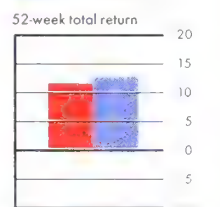
	%
4-week total return	
UNITED KINGDOM SMALL COMPANY	14.3
ARSON TELECOMMUNICATIONS INCOME	9.5
ELITY SELECT ENERGY SERVICE	9.2
52-week total return	
ELITY SELECT AUTOMOTIVE	52.1
EDOM REGIONAL BANK B	49.5
ELITY SELECT REGIONAL BANKS	49.1

LAGGARDS

	%
4-week total return	
SCHIELD AGGRESSIVE GROWTH	-10.3
OBERWEIS EMERGING GROWTH	-9.7
PRUDENT SPECULATOR LEVERAGED	-9.7
52-week total return	
DFA JAPANESE SMALL COMPANY	-33.6
NIKKO JAPAN TILT	-32.6
G. T. JAPAN GROWTH	-30.9

S&P 500

Average fund



RELATIVE PORTFOLIOS

DATA RESOURCES INC

amounts represent the present value of \$10,000 invested one year ago in each portfolio. Figures indicate 1-year total returns.



U. S. stocks
\$11,309
+1.89%



Treasury bonds
\$11,053
+0.45%



Money market fund
\$10,427
+0.06%



Foreign stocks
\$9,888
+0.89%



Gold
\$9,458
+0.21%

on this page are as of market close Wednesday, May 6, 1992, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close

May 5. Mutual fund returns are as of May 1. Relative portfolios are valued as of May 5. A more detailed explanation of this page is available on request

THE AMERICA WE CAN NO LONGER IGNORE

Television has not been kind to the American people in the past week. The unblinking screen that enters every household has presented a remorseless series of images. First, the already familiar and numbing picture of white policemen standing idly by while two of their number continue to beat a helpless, prone black man. Then, the shocking live tableau of hordes of people—mostly but not entirely young, black, and male—beating innocent bystanders, looting stores, and setting large sections of a U.S. city aflame in the face of impotent police and fire departments.

Such images will not easily fade from the nation's consciousness. Perhaps predictably in an election year, they have already given rise to an outpouring of partisan recrimination. Conservatives and Republicans have laid the blame for the riots at the doorstep of the Great Society programs of the 1960s, which in their view coddled criminals, enriched a welfare bureaucracy, wasted huge amounts of taxpayer dollars, and enfeebled the poor by reinforcing their dependency on government handouts. Democrats have decried the malign neglect of Republican Administrations that have turned their attention and federal dollars away from the cities and have starved social programs while cynically blaming the nation's poor and disadvantaged for their plight at a time of vast destabilizing structural changes in the economy.

We believe that it's time for reason to replace rhetoric, for the backbiting and maneuvering for political advantage to stop. The genius of Americans lies not in their ideological fervor, but in their pragmatism, in their willingness to listen, learn, experiment, and move forward. The experience of recent decades offers plenty of guidance to the steps the nation must take as it seeks to heal its urban ills and bring the restless, alienated youngsters that roam its inner cities into the mainstream of American life.

CRUEL IRONY. First, it's important to acknowledge that progress has been made. Affirmative action, antidiscrimination legislation, and the efforts and energy of blacks themselves have produced tangible results. One sign of this progress is the presence of black and minority faces at the highest levels of municipal, state, and national governments. Another is the emergence of a significant and vibrant black middle class. Indeed, one of the cruel ironies of this success is that it has worsened the plight of the poorest blacks, as upwardly mobile blacks have moved to the suburbs and thus removed the role models and support that an economically integrated community provides.

Second, it is clear that the growth of the underclass has many causes. The most disheartening aspect of the litany of problems besetting the underclass is that they are all real. The breakdown of the family and growth of female-headed households, a failing education system, the emergence of a drug culture, the loss of jobs to foreign manufacturers, suburban flight, and inadequate health care all contribute to the problem. Even worse, they are interactive in their effects. All of this means that there is no quick, single, easy solution to the crisis of our inner cities.

It does not mean, however, that there are no solutions. Some social programs of the 1960s, inspired by an unrealistic belief that government could solve all ills, wasted money and were often ineffective and even counterproductive. These included prison reform and many of the poorly targeted employment programs. We now know better. We know that the enemy is a beast with many heads, each of which must be attacked. We know, too, that out of the welter of programs developed in past decades, there were some that worked.

It is these that we would place in our agenda for the future. Such programs as Head Start, the Job Corps, and child nutrition need to be expanded. Educational initiatives such as merit pay for teachers and school choice should be strengthened, as should welfare reforms that link work to training to eligibility, eliminate requirements that discourage marriage, and remove disincentives to leave welfare rolls. We need to consider reviving public-service employment programs which gave work experience to the disadvantaged in the 1970s and provided their communities with teachers' aides and school guards. And enterprises that locate in blighted urban areas and self-help efforts by communities deserve greater support.

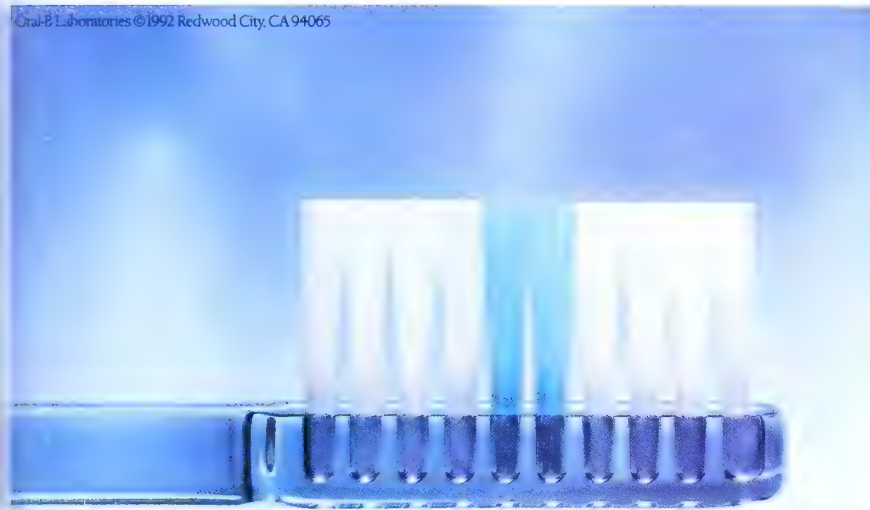
NEEDED VITALITY. At the same time, it's important to recognize that programs that address the general ills of the economy directly help the poor. This would be true of an overhaul of the nation's crumbling infrastructure. Such investment would have a potent effect on the nation's productivity, but it also provides jobs. Construction is a labor-intensive industry with need for semiskilled workers. Expanded public-work programs could offer entry-level jobs at relatively decent wages to the youth of our urban underclass who spurn menial low-paying jobs in favor of the rewards offered by drug trafficking and other crime.

Can we afford to mount a broad-based effort to help the underclass? The real question is whether we can afford not to. The U.S. incarcerates more people than any other nation, some 1.15 million at last count, at \$20,000 a head. Budget constraints underscore the need to spend money carefully, enlisting the participation of the private sector and mobilizing all of the communities at risk. And progress will be slow and halting, with no one program making more than a marginal difference by itself.

We believe that slowly, incrementally, with action on many fronts, the tide in our cities can be turned and many poverty-stricken people brought back into the mainstream of American life. We believe that such action is consistent with efforts to revive our overall economy via savings and investment, and should go hand in hand with such efforts. A dynamic expanding economy is the sine qua non of progress for our poorest citizens. At the same time, with the growth of the U.S. work force slowing dramatically in the 1990s, the economy's future vitality depends on the ability and readiness of all Americans to respond to the opportunities it offers. It is time to begin to enhance that ability and readiness in new

Your dentist can't remind you when to replace your toothbrush. That's our job.

Oral-B Laboratories © 1992 Redwood City, CA 94065



Oral-B INDICATOR® Toothbrush



*About 3 months later
(when dentists recommend replacing your toothbrush)*

Although dentists advise you to replace your brush, they really can't be there to tell you when. But the Oral-B Indicator can.

You see, the American Dental Association recommends you replace your toothbrush every three months. They believe strongly that a worn toothbrush is less effective at removing plaque. That's why most dentists tell you to change your toothbrush. And the very reason Oral-B developed the INDICATOR® Toothbrush. The blue band fades with brushing, so you can see when it's time for a new Indicator. It's that simple.

But developing the Indicator was anything but. It's been thoroughly researched over an extensive period with more than 1,500 patients and 300 dentists and hygienists.

Also, like all Oral-B brushes, the Indicator was clinically shown to be unsurpassed at removing plaque versus the other leading brands. Without any sign of gingival irritation or abrasion. No wonder Oral-B is the toothbrush more dentists use.

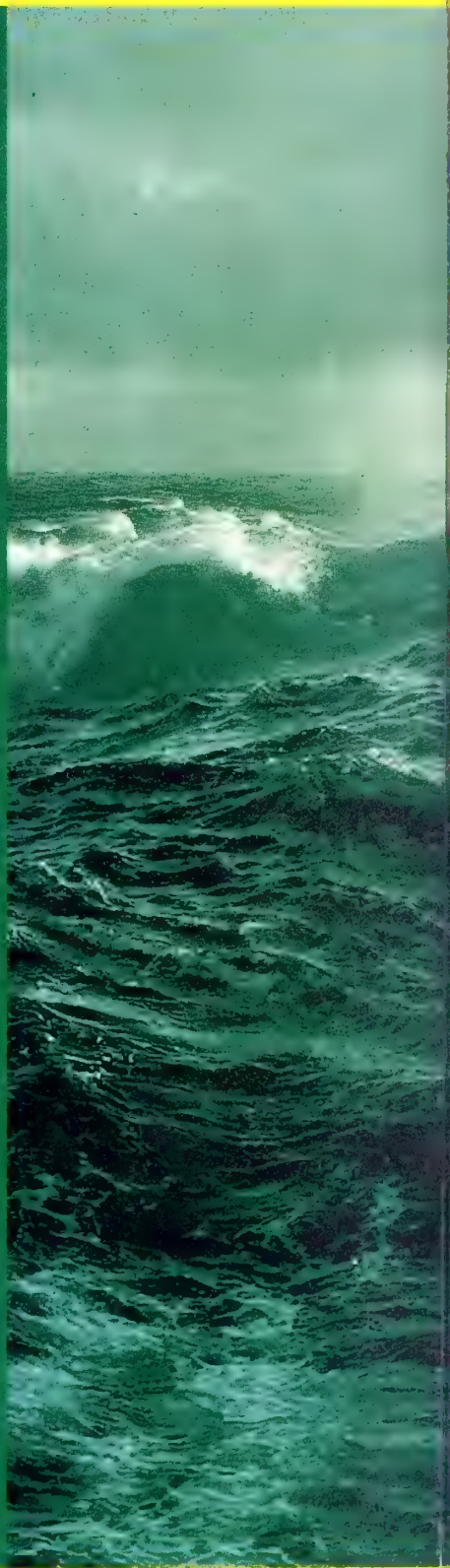
All in all, the Indicator is another fine example of Oral-B's ongoing commitment to serious dental care.

So listen to your dentist. Replace your brush with the Indicator from Oral-B. It's the ultimate gentle reminder.

Oral-B®

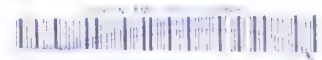
The Brand More Dentists Use.

**DIGITAL
OPENS
NEW FIELDS FOR
JOHN
DEERE**



D I G I T A L . T H E O

INESS WEEK
2 May 25



BusinessWeek

AY 25, 1992 A MCGRAW-HILL PUBLICATION \$2.75

HOT GROWTH COMPANIES

PAGE 88

ANNUAL RANKING OF THE 100 BEST SMALL CORPORATIONS



94010
*****5-DIGIT
0602 105811160 DEC92 136 2778
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA
94010-4083

MAY 1 1992
LIBRARY

Anyone who flies on
business as much as
you do, deserves a
medallion.





When you spend as much time in the air as you do in your office, we think you should be rewarded. On Delta, it's our Medallion Level. Besides giving our most frequent of flyers the special recognition they deserve, Medallion Level offers one class upgrades for just 2,500 frequent flyer miles. Dramatically-reduced mileage awards. And, even better, no blackout periods when using them.* To find out more about our Medallion Level, or for reservations, see your Travel Agent. Or call Delta. And discover how rewarding business travel can really be.



DELTA
We Love To Fly And It Shows.®

The Subaru SVX

State Troopers
aren't
the only ones
writing
up our new
Sports Car.



"The new SVX is an enthusiast's car—a car with the hardware, versatility and even the looks to make it a star."

-Popular Mechanics, August, '91

"The result is a powertrain that rivals the Lexus V-8 for smoothness and refinement, in a vehicle that offers much more entertainment than the LS400."

-Automobile Magazine, September, '91

"... can't use enough superlatives to describe this car on a curvy back road."

-Motor Trend, March, '92

"On dry pavement, it has no discernable vices, and even in gravel, snow and deluges, can be driven fast and hard with little effort and great confidence."

-Car and Driver, September, '91

"Its high 0.92 g skidpad rating approaches that of the Corvette ZR-1 and Acura NSX. And it slams through the slalom in nearly the same league as the Acura NSX, Nissan 300ZX, and Porsche 944S 2—proving its ability to travel in fast company indeed."

-Motor Trend, September, '91

"The SVX's strong point is lots of usable pull—where you need it, when you need it."

-Autoweek, August, '91

"The virtues of Subaru's new luxury/performance car made it our unanimous choice as this year's purest engineering effort, and worthy recipient of Automotive Industries' 1992 Engineering Award."

-Automotive Industries, December, '91



Subaru. What to drive.



JACK SCHOOF OF ARTISOFT: THE COMPANY, WHICH SELLS SYSTEMS THAT LINK PCs, IS NO. 1 ON BW'S ANNUAL HOT GROWTH LIST

Cover Story

88 HOT GROWTH COMPANIES

While much of Corporate America languished last year, sales at BW's top 100 small businesses grew 48.3%, vs. 6.2% for the Standard & Poor's industrials. And profits soared 100.9%, vs. a drop of 14.3% for the S&P 400. Still, as the recovery kicks in, growth stocks could get burned

90 ARTISOFT

This networker 'shot out of nowhere'

91 OUTBACK STEAKHOUSE

Big steaks, low prices, lots of sizzle

91 SOFTWARE SPECTRUM

Programs for every occasion

92 NATIONAL REHABILITATION

Getting the injured back on the job

92 SCORE BOARD

Cash from sports collectibles

94 WHOLE FOOD MARKETS

Putting tofu into the mainstream

96 HOT TODAY, COLD TOMORROW?

The risk of small-company stocks

Top of the News

26 THE GREAT AMERICAN MARKET

A free-trade deal with Mexico and Canada may be ready by summer

28 COMMENTARY

How to balance the budget

29 REENTER ENTERPRISE ZONES

Will business follow tax incentives?

30 CHRYSLER'S UPSCALE DRIVE

Can the LH line rev up its image?

31 AN EAGLE GETS THE EAGLE EYE

Test-drive kudos for the Vision

31 BIG DEAL FOR BIG BANKS

Interstate branches may be coming

32 OIL'S NEW FRONTIER

Chevron treks to the republics

34 IS ROYAL CARIBBEAN AT SEA?

The cruise line's debt is staggering

36 CALIFORNIA IS TOSSING EGGS

Bush and Clinton will get splattered

38 IN BUSINESS THIS WEEK

Apple, Euro Disneyland, Kemper, the Indy 500 booby prize, Amoco, UPI, a U. S.-German air pact

International

42 GERMANY

Top manufacturers are fleeing the fatherland—good news for the U. S.

43 EUROPE

Renault and Volvo are the first of a coming wave of auto mergers

46 CHINA

A U. S. Customs dragnet could snag some big U. S. retailers

49 INTERNATIONAL OUTLOOK

NATO: New mission for an old cold warrior

Economic Analysis

18 ECONOMIC VIEWPOINT

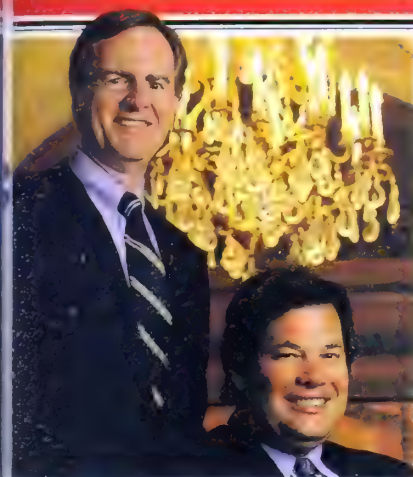
Becker: America and the myth of industrial policy

22 ECONOMIC TRENDS

The profit surge, future growth, hunger for imports, car sales

23 BUSINESS OUTLOOK

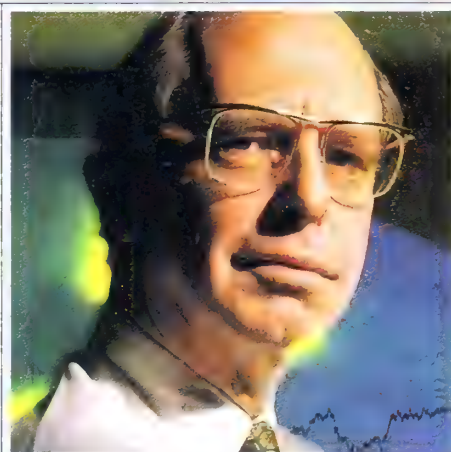
Inflation may well be a no-show in this recovery



10 APPLE'S DIZZYING LEAP:
PERSONAL ELECTRONIC GIZMOS WILL
BE JUST THE START AS JOHN SCULLEY
STEERS HIS COMPANY INTO A BRAVE
NEW ALL-DIGITAL FUTURE



26 FREE TRADE, BLOC BY BLOC:
A NORTH AMERICAN TREATY IS
INCHING CLOSER TO REALITY. WILL
SUCH REGIONAL AGREEMENTS ECLIPSE
THE IMPORTANCE OF GATT?



104 FEET FIRST INTO THE FRAY:
FIDELITY'S EXPANDED FINANCIAL
SERVICES AND AGGRESSIVE NEW
MARKETING PIT IT AGAINST CITI,
PRUDENTIAL, AND MERRILL LYNCH

Government

11 WASHINGTON OUTLOOK
L. A.'s fire bestirs the White House

Regions

10 HIGH-TECH HEAVEN
Startups surge in the Northwest

People

16 KEEPING JAZZ ON THE 'A' TRAIN
How impresario George Wein makes
music with Corporate America

Industries

51 TOUGHING OUT THE GAS GLUT
New tactics are letting some
producers keep profits up

52 IN MEXICO, GAS BURNS BRIGHT
It's a boon for U. S. producers

Science & Technology

31 DEVELOPMENTS TO WATCH
Quieter jets, biotech, cholesterol,
circuit boards, trash swaps

34 DRIVE, IT SAID
Smart cars, smart roads

37 WILD RIDE IN ORLANDO
Testing new car-guidance gadgetry

Finance

34 FIDELITY COURTS THE MASSES
A new tack for the investment firm

36 FEARLESS NED JOHNSON
Fidelity's leader goes his own way

108 MUTUAL-FUND FEES FACE THE AX
The SEC wants to foster price
competition by cutting load charges

110 TOKYO LOWERS A BOOM
It cracks down on U. S. brokerages

114 INSIDE WALL STREET
What's powering Black & Decker
A land play in Israel?
Helping hands, healthy profits

141 INVESTMENT FIGURES OF THE WEEK

Marketing

116 NO OFF-THE-RACK SOLUTIONS
Turning around The Limited's two
big divisions, fast, is a tall order



124 WOUNDED MESSENGER:
FEDERAL EXPRESS CHARGED INTO
EUROPE. BUT AFTER FOUR YEARS OF
BIG LOSSES, IT'S BEATING A
STRATEGIC RETREAT

Information Processing

120 BEYOND MACS
Apple's plan for the 21st century will
take it into uncharted markets

122 FIRST OFF THE TREE
Apple's Newton falls to market

122E BITS & BYTES

The Corporation

122F ASTRA'S SPUTTERING ENGINE
The belle of Southeast Asia's boom is
struggling to get back on track

124 FEDEX: A NOT-SO-GRAND TOUR
Its foray into Europe cost a bundle

Personal Business

132 FINANCES: Checking credit reports
ELECTRONICS: Labelmaking devices
SMART MONEY: No-load insurance
OUTDOORS: Sea kayaking
TRAVEL: Vacation house-swapping

Features

6 BUSINESS WEEK INDEX

7 READERS REPORT

10 CORRECTIONS & CLARIFICATIONS

12 BOOKS

22D LETTER FROM EAST NEW YORK

139 INDEX TO COMPANIES

142 EDITORIALS

How to narrow the income gap
Protectionism still haunts the Hill
Cleaning up the Superfund

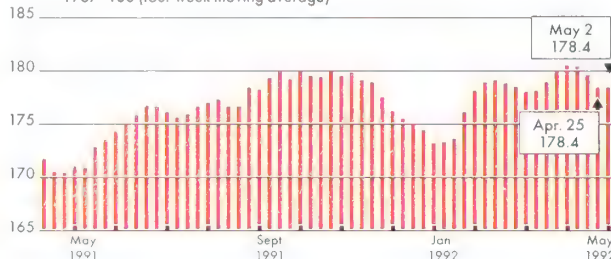
BusinessWeek Index

PRODUCTION

Change from last week: 0.0%

Change from last year: 4.3%

1967=100 (four-week moving average)



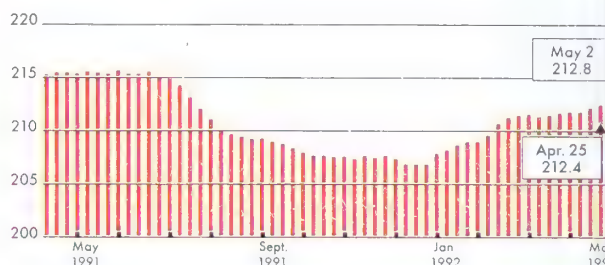
The production index was unchanged for the week ended May 2. Seasonally adjusted output of autos and trucks was up strongly, with gains in electric power, coal, paperboard, paper, lumber, and rail-freight traffic as well. Steel and crude-oil refining production fell. Before calculation of the four-week moving average, the index surged to 179.3, from 177.4. For the month of April, however, the index fell to 178.6, down from 179.9 in March, but about even with the 178.5 level of February.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.2%

Change from last year: 1.2%



The leading index edged up slightly during the week ended May 2. Higher stock prices, fewer business failures, and improved growth rates for real estate loans and materials prices were all positive signs for the economy. However, bond yields were higher, and a sharp drop in the growth rate of M2 was especially worrisome. Before calculation of the four-week moving average, the index rose to 213.9, from 212.3. In April, the index increased to 212.7, from 211.6 in March.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/9) thous. of net tons	1,815	1,792#	14.9
AUTOS (5/9) units	134,277	131,018r#	17.3
TRUCKS (5/9) units	87,168	84,886r#	27.2
ELECTRIC POWER (5/9) millions of kilowatt-hours	51,826	51,854#	0.7
CRUDE-OIL REFINING (5/9) thous. of bbl./day	13,155	13,234#	-2.7
COAL (5/2) thous. of net tons	18,309#	18,207	-4.4
PAPERBOARD (5/2) thous. of tons	829.3#	816.4r	12.8
PAPER (5/2) thous. of tons	777.0#	768.0r	4.9
LUMBER (5/2) millions of ft.	502.6#	499.6	-2.4
RAIL FREIGHT (5/2) billions of ton-miles	20.5#	20.2	9.0

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWSA, SPPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/13)	130	132	138
GERMAN MARK (5/13)	1.62	1.63	1.71
BRITISH POUND (5/13)	1.81	1.79	1.74
FRENCH FRANC (5/13)	5.45	5.50	5.77
CANADIAN DOLLAR (5/13)	1.21	1.20	1.15
SWISS FRANC (5/13)	1.50	1.50	1.45
MEXICAN PESO (5/13) ¹	3,071	3,065	3,000

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/13) \$/troy oz.	335.200	336.700	-6.9
STEEL SCRAP (5/12) #1 heavy, \$/ton	92.00	94.00	-3.2
FOODSTUFFS (5/11) index, 1967=100	202.3	203.3	-0.7
COPPER (5/9) ¢/lb.	104.1	103.8	-3.1
ALUMINUM (5/9) ¢/lb.	60.1	60.5	-0.8
WHEAT (5/9) #2 hard, \$/bu	4.02	3.92	33.1
COTTON (5/9) strict low middling 1-1/16 in., ¢/lb	55.73	56.53	-32.6

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market.

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/8) S&P 500	416.49	411.41	9.0
CORPORATE BOND YIELD, Aaa (5/8)	8.35%	8.37%	-0.2
INDUSTRIAL MATERIALS PRICES (5/8)	97.7	97.7	-0.1
BUSINESS FAILURES (5/1)	422	453	-6.2
REAL ESTATE LOANS (4/29) billions	\$403.2	\$401.1r	-0.5
MONEY SUPPLY, M2 (4/27) billions	\$3,434.3	\$3,443.8r	-0.3
INITIAL CLAIMS, UNEMPLOYMENT (4/25) thous.	415	404	-2.7

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (Apr.)	178.6	179.9r	-0.7
BUSINESS WEEK LEADING INDEX (Apr.)	212.7	211.6r	-0.5
EMPLOYMENT, CIVILIAN (Apr.) millions	117.7	117.3	0.3
UNEMPLOYMENT RATE, CIVILIAN (Apr.)	7.2%	7.3%	-0.1

Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (4/27)	\$941.6	\$945.9r	-0.5
BANKS' BUSINESS LOANS (4/29)	286.6	286.6r	-1.1
FREE RESERVES (4/29)	1,105r	1,014r	9.0
NONFINANCIAL COMMERCIAL PAPER (4/29)	145.8	145.1	-0.5

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (5/12)	3.75%	3.77%	5.78
PRIME (5/13)	6.50	6.50	8.50
COMMERCIAL PAPER 3-MONTH (5/12)	3.85	3.93	5.94
CERTIFICATES OF DEPOSIT 3-MONTH (5/13)	3.76	3.84	5.94
EURODOLLAR 3-MONTH (5/9)	3.85	3.95	5.94

Sources: Federal Reserve Board, First Boston



Lots of people are working to get kids off the street.

Every year, over 5,000 American children are buried in unmarked graves. And a lot of people work very hard to put them there. Drug dealers with dirty needles. Pimps who rule with a fist. Child molesters in expensive cars. Fortunately, Larkin Street is working to get kids off the street, too. With food, clothing, medical care, professional counseling—and lots of hope.

Please support Larkin Street's work.

Kids are dying for your help.

Larkin Street Youth Center

1044 Larkin Street, San Francisco, CA 94109

415-673-0911



How we look to our members.

Today, in a world grown less forgiving and more competitive, a lot of businesses seem to be groping for silver bullets. Secrets to success.

So here they are.

Give really good service. And put your money in a safe place.

At least, that's what works for us.

So when our members think of Blue Cross of California, they have a

vision of a person at the other end of the phone who is very well trained, responsive, and competent.

Someone to call when they need answers. Our bankers, however, have a different picture.

They just see the largest health insurer in California. A company with absolutely no debt. A company with \$1.2 billion in assets.

And since most of those assets are in cash and prudent long-term investments (as opposed to junk bonds or desert resorts), it makes those bankers feel very secure.

Which, come to think of it, is the same way we make our members feel.



**Blue Cross
of California**

WE MAKE THE SYSTEM WORK FOR YOU

Blue Cross of California is a member of the Blue Cross Association. Member services provided by Blue Cross of California.

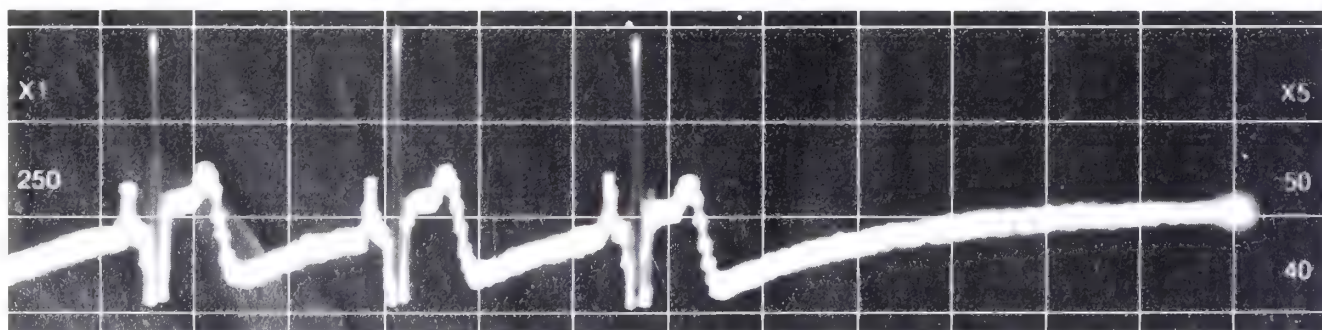


How we look to
our bankers.



Official Sponsor
of the 1992
U.S. Olympic Team

UNFORTUNATELY, THE WAY TO A MAN'S HEART REALLY IS THROUGH HIS STOMACH.



While your cooking was supposed to help you win someone's heart, it may also help you destroy it.

Because a diet that's too high in fat may increase the risk of heart disease as well as certain kinds of cancer.

Fortunately, you can help reduce your risk simply by eating a low-fat diet containing lots of fruits and vegetables, whole grain foods, lean meats, fish, poultry and low fat dairy products.

For a free booklet on how to reduce the fat in your diet,

call 1-800-EAT-LEAN.

Don't let yourself be counted among the thousands of people every year who literally eat their hearts out.

1-800-EAT-LEAN



A public service message from The Henry J. Kaiser Family Foundation

DITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: John A. Dierdorff
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Robert J. Dowling, Mark Morrison, G. David Wallace
DEPUTY DIRECTOR: Malcolm Frouman
SENIOR EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, Judith H. Dobrynski, Marc Frons, Geoff Lewis, Gino Scotti, Iark N. Varnos, Lee Walczak (Washington), Chris Welles, Seymour Zucker
DITORIAL PAGE EDITOR: John E. Pluenneke
CHIEF OF CORRESPONDENTS: Keith G. Felcyn
INTERNATIONAL EDITION: William J. Holstein (Editor), Elizabeth Feiner (Sr. Editor)
SENIOR WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis (Chicago), William Glasgal, Gene G. Marcial, Bruce Nussbaum, John Pearson, Karen Pennar, Otis Port
ASSOCIATE EDITORS: Duane E. Anderson, Deidre A. Depke, Amy Unkin, Peter Finch, Jeffrey M. Laderman, William D. Marbach
EDITORIAL OPERATIONS: Thomas J. Reed
ICTURE EDITOR: Lawrence Lippmann
SENIOR ART DIRECTOR: Laura Baer
EDITOR OF SYSTEMS: Claire Conte Worley
ECONOMICS: James C. Cooper (Sr. Economist/Business Outlook editor), Kathleen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel (Assoc. Economics editor), Gene Koretz (Economic Trend editor)
DEPARTMENT EDITORS: Books: Denise Demong, Corporate Finance: Larry Light, Industries: Thane Peterson, Information Processing: John W. Venty, International Edition: Joyce Barnathan, International News: Peter Galuszka, Stanley Reed, Investment Banking: Leah Nathans, Spiro Legal Affairs: Michele Allen, Marketing: Christopher Power, Mark Landler (Assoc.), Markets & Investments: Gary Weiss, Money & Banking: John Meehan, News: Donald H. Dunn, People: Michael O'Neal, Personal Business: Donald H. Dunn, Joan Warner, Science: Emily T. Smith, Coreboards: Fred F. Jespersen, Social Issues: Troy Segal, Technology: Robert Buden, Telecommunications: Peter Coy, Transportation: Andrea Rothman, The Workplace: Aaron Bernstein
OFF EDITORS: Naomi Freudenich, Evan I. Schwartz, Ron Stodghill II, Zjanne Woolley, Laura Zinn, Paul M. Eng (Asst. editor)
PICTURE EDITORS: Harry Maurer (Deputy chief), Prudence Crowther, Michael Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack Robbins, Jim Tabi (Sr. copy editors), Pam Black, Carl Desens, Hardy 'een, Aleta Kaufman, Cynthia McClean, David Pengilly, Maika Percal, Roy Royalty, Gail Fowler, Dalia Kadiyoti, Aida Rosario, Eva Stettner (researchers)
PRODUCTION COPY EDITORS: Donald Halsband (Chief), Hallberg, Almudsson, Celine Keating, Robert S. Norman, Lawrence Dark, Ephar M. Romanoff
ST: Steven Taylor (Deputy director), Cynthia Friedman, Francesca Essina, Jay Petrow (Assoc. directors), Alicia Cheung, Craig Socia (Asst. directors), Graphics: Arthur Eves (Director), Joan Danaher (copy director), Rob Doyle (Sr. Illustrator), Laurel Dawnis, Beto Mena, Ray Vella (Illustrators), Jamie Beauchamp (Computer Art Production: Stephen J. Romeo (Mgr.)
OTOS: Sue Bloom (Deputy Picture editor), Todd James, Scott Mlyn, Annie Weil (Assoc. Picture editors), Anne Murray (Asst. editor), Thelene Daly (Researcher), Bettina Baudoin (Researcher - Plans), Ian Clark (Traffic), Lawrence Crowe (Librarian)
EDITORIAL OPERATIONS: Richard Balestino, A. Peter Clem, Yvonne Rodriguez (Production managers), Thomas R. Dowd, Sharon L. Eng, Jai Lee, Jose L. Martin, Jane M. Parkinson, Craig Sturges, Karen Tok, Ise V. Walton, Nicholas White (Makeup editors), Dale I. Arnold, Ed Lundy, Edgardo Torres (Asst. makeup editors), Donald C. Carlson (Traffic manager), Bruce M. Arnold, Leo Corbie (Production Sts.)
IRRESPONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walacia Konrad (Asst.), Gary McWilliams, Geoffrey Smith (Chicago: David Greising (copy Mgr.), Julia Flynn, Kevin Kelly, Lois Thermen, Cleveland: Ichary Schiller (Mgr.), Connecticut: Lisa Driscoll, Dallas: Wendy Hiner (Mgr.), Stephanie Anderson Forest, Detroit: James B. Trece (copy Mgr.), David Woodruff, Los Angeles: Ronald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), Kathleen Kerwin, Eric Schine, Miami: Al DeGeorge (Mgr.), Philadelphia: Joseph Weber (Mgr.), Pittsburgh: Michael Schroeder (Mgr.), Maria Mallory, San Francisco: Issell Mitchell (Mgr.), Richard Brandt, Joan O'C Hamilton, Robert J. Kathy Rebello, Seattle: Don Jones Yang (Mgr.), Washington: John H. Wildstrom (Sr. News Editor), Stan Crook (News Editor), New York: Brian Bremner, John Carey, Paula Dwyer, Dean Foust, Ian B. Garland, Howard Gleckman, Douglas Harbette, Peter Hong, Kirk Lewyn, Paul Magnusson, Mike McNamee, Tim Smart, Catherine Kirk, Christina Del Valle (Asst. editor), Bonn: John Templeman (Mgr.), Gail Schares, Hong Kong: Pete Engardio, London: Richard A. Jlicher (Mgr.), Mark Maremont, Mexico City: Stephen Baker (Mgr.), Moscow: Rose Brady (Mgr.), Paris: Stewart Toy (Mgr.), Bill Javetski, Nathan B. Levine, Rome: John Rossant (Mgr.), Tokyo: Robert Neff (Mgr.), Neil Gross, Ted Holden, Karen Lowry Miller, Toronto: William Symonds (Mgr.)
EDITORIAL SERVICES: Broadcasting: Ray Hoffman, Business Manager: Barbara Boynton, Information Services: Jude T. Hayes (mgr.), Judi Crowe (Asst. editor), Fred Katzenberg, Elisa S. W. Xuelan, Office Manager: Roselyn Kopit, Public Relations: Christine Summerson, Josephine Coppola, Readers Report: enobia Brown, Reprint Permission: Lawrence Clayton, System: Ina L. Kichen (Mgr.), Ron Brayer, Courtenay Eddy
PUBLISHER: John W. Patten
VP, OPERATIONS: Gary B. Hopkins
VP, ADVERTISING SALES: Karl A. Spangenberg
INTERNATIONAL: Gerd Hinkle
CIRCULATION: Kitty Carroll Williams
DIRECTOR OF MARKETING: Cara Enckson
SALES: Constance E. Bennett (San Francisco), G. Jarvis Coffin (Atlantic Region), Dan Dunn (Chicago), Molly F. Ford (Northeast Region)
INTROLLER: Gary M. Singer
RECTOR, ADVERTISING BUSINESS: Linda F. Carvalho
RECTOR, PRODUCTION: Mario J. Talluto

A BUCK FOR CAMPAIGN FINANCING IS A BUCK DOWN THE DRAIN

In "Want campaign-finance reform? Just check the box" (Top of the News, Apr. 27): Checking the box on one's income-tax return to designate \$1 for Presidential campaign financing might not cost an additional dollar in taxes today...but each dollar given to campaigns means a dollar not spent on homelessness, job training, health care, etc. There has been no demonstrable decline in the clout of special-interest groups from past public-financing efforts, and taxpayers see no reason to waste money on campaigns they find offensive. Now we are supposed to extend public campaign financing to Congress? Forget it!

Richard Schuler
St. Peters, Mo.

You refer to "legislative reform" as though it's your goal, but you want us to give those Washington fat cats more of our money in order to have the system clean itself up. Good idea. I'm sure you fit right in with those good ol' D. C. boys.

Russell Palmer
Hermosa Beach, Calif.

JUST WHAT IS CASTRO TAKING TO MARKET?

Yes, Mr. Castro is going to market ("Mr. Castro goes to market," International Business, Apr. 20). He is going to market with property stolen from U.S. citizens and corporations in the largest uncompensated seizure of American property by a foreign government in the history of our country. Last fall, the State Dept. sent an all-stations cable advising that Cuba may be selling, leasing, or joint-venturing to foreign investors American properties that are the subject of outstanding claims by American citizens.

The cable further advised foreign governments to take the necessary steps to encourage their nationals and businesses to avoid entering into contracts with the government of Cuba that may be legally encumbered by unresolved claims to

such assets by American citizens. We must not forget that the basic reason for imposing the economic embargo on Cuba in 1962 was that U.S.-owned property was seized without prompt, adequate, and effective compensation as required under international law.

David W. Wallace, Chairman
Joint Corporate Committee
on Cuban Claims
Stamford, Conn.

WHY THE NUCLEAR INDUSTRY NEEDS TO HELP THE EAST

The deterioration of the nuclear-power industry in the former Eastern bloc is indeed extremely disturbing ("Many Chernobyls just waiting to happen," Science & Technology, Mar. 16). A serious accident in the East would reverberate throughout the international nuclear-energy community, regardless of whether such an accident was even possible in other countries.

We must immediately begin to either provide funds or direct grants of equipment. Although European equipment suppliers have reacted negatively to being asked to "give away our equipment," they must realize it is either help the East or risk losing the industry as a result of public reaction following an accident. Through the World Association of Nuclear Operators (WANO), we can provide training and staffing support.

The world cannot afford to give up this major source of energy that produces neither acid rain nor greenhouse gases simply because we are too parochial to help our weaker sisters.

Theodore M. Besmann
Research Group Leader
Oak Ridge National Laboratory
Oak Ridge, Tenn.

LIFE ON WELFARE IS HARDLY A PICNIC

In "Revamp welfare to put children first" (Economic Viewpoint, Mar. 30), Gary Becker accepts the common mythology of the "welfare queen" who is getting rich by popping out another baby every year. In California, an extra child brings in an additional \$60 per month in benefits. Hardly a windfall in a

BUSINESS WEEK
MAY 25, 1992 ***3267
ISSN 0007-7135



Published weekly, except for one issue in January, by McGraw-Hill, Inc. Founder: James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: (212) 512-2000. Domestic Telex: 12-7960, International Telex: 232365. Cable: McGraw-Hill New York, TWX 710-381-4879. U.S. subscription rate \$44.95 per year, 2 years \$74.95, 3 years \$99.95. Single copies, \$2.75. Write for rates in other countries. Business Week Subscriber Services: 1-800-635-1290.

PHOTOCOPY PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609-426-5494. ISSN 0007-7135/92 \$2.75.

European Circulation Center, McGraw-Hill House, Maidenhead, Berks, England. Telephone (44) 23431. Telex: 849640. Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9019. Registered for GST as McGraw-Hill, Inc. GST #R12307-673. Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Donne, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Penglase, Senior Vice President, Treasury Officer.

HOW THE BANK OF BOSTON ANACOMP FICHE INTO

Managing costs in a tough economy is a way of business at Bank of Boston, a \$32 billion retail bank with offices worldwide.

Inundated by an expensive tidal wave of paper, the bank invited us to tackle the problem.

They challenged us to develop an information

storage and retrieval system that would meet the following criteria:

- Demonstrate significant and measurable savings.
- Be the most cost-effective solution and work in conjunction with emerging technologies.
- Improve customer service and enhance graphic

JUST WHAT IS FICHE?

Each Anacomp fiche is a 4"x 6" sheet of microfilm that holds up to 700 pages of information. In most cases, fiche can be retrieved and used more quickly than competing media such as magnetic tape and optical disc. Most important, savings in the cost of paper, storage space, mailing costs, and manpower make fiche far and away the most cost-effective way to store and retrieve data.

© 1992 Anacomp, Inc



BOSTON TURNED A \$500,000 SAVINGS.

replication of reports and statements.

- Satisfy "total" bank needs, not merely selected applications and locations.
- Gain the enthusiastic endorsement of all user groups within the bank.
- Stop the flood of paper!

Our winning recommendation, encompassing Anacomp's unique micrographic hardware, software and service solutions, met and exceeded all of the criteria. The Bank of Boston saw improvement in information distribution, storage and retrieval and achieved a

cost savings in manpower, space and paper that exceeded \$500,000 in the first year.

Michael Simmons, EVP with the Bank of Boston, suggested "Anacomp should bottle its solution and make it widely available." That's why we decided to run this ad; we listen to our customers.

Let us "Anacomp your company." To find out how, contact P. Lang Lowrey, SVP, Anacomp, Inc., 3060 Peachtree Road, N.W., Atlanta, GA 30305, or call (404)262-2667.

anacomp

The Image Of The Future



LET
US
ANACOMP
YOUR
COMPANY

Readers Report

state whose "liberal benefits" don't even cover the rent in many communities. Furthermore, the average number of children per Aid to Families with Dependent Children household is 1.6.

What was most disturbing about Becker's article was his assumption that welfare parents don't care about or take good care of their children. Many women have chosen the welfare path precisely because they do care about their children and want to raise them themselves.

I agree with Becker on one point, the welfare system needs massive overhauling. But...it is not the benefits that provide disincentives, it is the punitive, backward restrictions the welfare system imposes that make it nearly impossible to move on to self-sufficiency.

Marsha Bailey, Executive Director
Women's Economic Ventures
Santa Barbara, Calif.

HABITAT: BURNED BY THE MAGNIFYING GLASS

Your article "Putting charities under a magnifying glass" (Personal Business, Apr. 13) states that "Habitat for Humanity, which sponsors low-income housing projects, spent 33% of its in-

CORRECTIONS & CLARIFICATIONS

In the Bank Scoreboard (Apr. 27), we misstated several numbers for Industrial Bank of Japan Trust Co. The correct numbers for 1991: loans, \$2,456 million; net charge-offs as a percentage of loans, 0.1%; net interest income, \$73 million; net income as a percentage of net interest income, 31%.

In a profile of NBC President Robert C. Wright (25 Executives to Watch, 1992 BUSINESS WEEK 1000), we referred to a loss at NBC. While the network lost \$60 million in 1991, the parent company, NBC Inc., actually earned an estimated \$154 million because of profits from its owned-and-operated stations.

come to bring in money..." Let me explain the problem of the percentages you cited. Out of a total income last year of over \$75 million, only \$25 million came to our international headquarters. The local affiliates pick up none of the expenses for the regional offices, even though they are almost exclusively for the benefit of the affiliates in their respective areas.

The affiliates do send a percentage of their income to this office for our overseas work, but that percentage is approximately 5%. Some affiliates give 10% or more, but others give much less. If you were to look at the combined income of all of Habitat's work throughout the country, you would have a percentage figure of perhaps 10% or no more than 15%.

Millard Fuller
President

Habitat for Humanity International
Americus, Ga.

IT MUST HAVE BEEN THE MINT JULEPS

Shame, shame, shame. Your article "got the horse right here" (Sports Business, May 4) discussed the "117th Kentucky Derby." It was the 118th Run for the Roses!

John Engelhardt
Louisville

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4466. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

IF YOU HAVE AN EYE PROBLEM, YOU DON'T GO TO A FOOT DOCTOR.

If you're buying commercial or specialty lines insurance, why would you go to anybody but The Home?

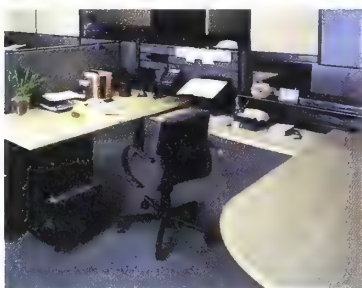
At The Home Insurance Company, we've become specialists in underwriting large, complex business and specialty accounts. And this has its advantages. Often we find ways to insure risks other companies don't quite understand. At the very least, we can show you how to make your premiums work a little harder. Talk to your agent or broker.

Home Insurance
OLD PROS ON A NEW TEAM



**The average employee
spends 9.6% more time
at the workplace
than in bed.**

**Fortunately, this is
no average workplace.**



It's the RACE[®] furniture system by Haworth. Simply beautiful. Beautifully adaptable. Designed for the way business people really work. ▼ We know, because we've been working with them for over 40 years. Making work spaces more comfortable. Work hours more productive. ▼ Could a Haworth system mean more quality time and less overtime for your employees? For information about our company and our complete line of office furniture, call Laura Cramer at 1-800-344-2600.

HAWORTH WORKS FOR BUSINESS.

HAWORTH

COLIBRI LE GRAND.
AFFORDABLE LUXURY
FROM \$29.95



Colibri
LE GRAND

Lifetime Mechanical Warranty

Available at

Richard's

Luggage & Handbags

or call 1-800-556-7354

Books

WHO WILL TELL THE PEOPLE: THE BETRAYAL OF AMERICAN DEMOCRACY

By William Greider

Simon & Schuster • 464pp • \$25

FROM 'WE THE PEOPLE' TO 'WE THE PATSIES'

Chances are I'll soon forget most of the '92 Presidential campaign, but one moment will stay with me. It was in a United Auto Workers hall in Flint, Mich., where aging workers had turned out with their children and grandchildren to see Jerry Brown.

The candidate appeared in his turtle-neck and UAW jacket and launched rather nonchalantly into his "We the People" stump speech. Then he noticed something: The crowd was a generational cross-section of a dying town. Suddenly, Brown the politician disappeared, and The Voice took over. Brown's face reddened, the veins in his forehead stood out, and in a stream of consciousness I can't do justice to here, he railed against the corrupt, uncaring elites that have taken control of American politics. There was nothing canned about his words; real feeling welled up. "Take it back! Take it back!" he screamed. The crowd surged to its feet, including me—until I remembered that I am, after all, a dispassionate, paid observer.

From Brown to Buchanan to Perot to Tsongas, politicians this year are trying to tap The Voice—to express the gnawing fear in the average American's gut that the nation is in economic decline, politicians are in the pockets of monied interest groups, and Washington is a basket case. People feel alienated and powerless. Witness the abysmal voter turnout in the primaries.

Now comes William Greider to tell readers to heed The Voice: American democracy is in even deeper trouble than they imagine. The government, he says, is in the grip of a global consortium of powerful interests and elites. While Washington eagerly accommodates the wishes of these influential insiders, ordinary citizens watch helplessly as their standard of living falls, environmental and safety laws are gutted, and they get stuck paying for fiascos like the S&L bailout. "The problem of modern democracy," Greider writes, "is rooted in its neglect of unorganized people."

Consumer activist Ralph Nader has made a career of such rhetoric. But Greider isn't so easily dismissed. It was Greider, as a *Washington Post* editor, who got David A. Stockman to confess in 1981 that Reaganomics was a fraud. Later, in his acclaimed 1987 book, *Se-*

crets of the Temple, he illuminated the workings of the Federal Reserve. Now writing on politics for *Rolling Stone*, he has developed a distinctive persona: the insider who writes like an outsider.

What makes his book so interesting is that he is almost as disgusted with the do-gooders as he is with the governing and corporate elites. Or rather, he believes the do-gooders no longer do much good. Newspapers and unions have lost

Lobbyists and
PR firms hold sway,
says Greider,
and do-gooders
do little good

Who will
tell the
People



The betrayal of
American democracy
**WILLIAM
GREIDER**
AUTHOR OF SECRETS OF THE TEMPLE

touch with those they're supposed to serve. The Republican Party protects and rewards its corporate "clients." The Democratic Party is "not much more than a mail drop for political money." And the vacuum is being filled by scores of corporate-financed think tanks, public-relations firms, and direct-mail companies, all serving up cleverly disguised propaganda as well as campaign funds. "Washington now is more aptly visual-

WHEN OVER 75,000 LIVES
ARE ON THE LINE

WHO DO YOU WANT
STANDING BEHIND YOUR
PHONE SYSTEM?



When life or death is just a breath – or a phone call – away, you don't pick an ordinary phone system.

You pick one that's based on the simple design premise that *all calls can get through!*

But Fujitsu's non-blocking architecture wasn't the only reason that New England's newest medical center – the \$218-million Dartmouth Hitchcock Medical Center (DHMC) – selected their F9600 digital PBX to take it into the 21st century. DHMC also wanted a system that was compatible with their existing phones. A system that transmitted voice, data, fax and video images to 4,700 terminals over a seven-mile network of fiber optic cable.

And a support team committed to Integrated Services Digital Network (ISDN) applications.

The answer was Fujitsu, a \$21-billion global telecommunications and computer leader serving over 100 countries.

To see what answers the F9600 has for you, call 1-800-553-3263.



The F9600 Digital Telephone from Fujitsu, a \$21-billion global telecommunications leader serving over 100 countries

FUJITSU

Computers, Communications, Microelectronics

Get Bullish On Love.



THE DIAMOND ANNIVERSARY BAND.
Whether it's your 1st, 5th or 10th anniversary, this year,
tell her you'd marry her all over again.

A diamond is forever.

BAILEY BANKS & BIDDLE

JEWELERS SINCE 1888

De Beers

Suggested retail price for ring \$2,195.

Turn your
excess inventory
into a substantial
tax break and
help send needy
kids to college.

Call for your
free guide
to learn how donating your
slow moving inventory
can mean a generous
tax write off
for your company.

Call (708) 690-0010
Peter Roskam
Executive Director



P.O. Box 3022, Glen Ellyn, IL 60138
FAX (708) 690-0565

*"I don't know doctor, ever
since we made this acquisition,
I've been seeing double!"*



Books

ized as a grand bazaar—a steamy marketplace of tents, stalls, and noisy peddlers. The din of buying and selling drowned out patriotic music."

Take taxes. In considerable depth Greider explores how tax legislation is enacted. It's "a running game of bait and switch, a hustle in which the governing system plays the clever salesman while the taxpayers are the mark." And how else could one describe the massive tax reform bill of 1986? It helped the rich while cutting the little guy's taxes by an amount sufficient to buy a yearly hot dog. Greider's strength: While other observers debate such outcomes, he reveals how they're perpetrated.

To an extent, he blames Nader and other reformers who trusted public-interest lawyers and lobbyists to represent the public's interest in Washington. Bad move. Multinational corporations and business interests with vastly superior resources have triumphed by co-opting such techniques. One of Greider's most interesting chapters, "Mock Democracy," describes Washington entrepreneur Jack Bonner, who for a fee will produce an agreed-upon number of "live voters" to contact lawmakers on behalf of a company's or industry's position.

Also fascinating is Greider's dissection of the impact of the evolving global economy on American institutions. In "Citizen GL," he explores how multinationals operate without regard for national boundaries or a national ethos.

Sometimes, Greider overdoes it: He sees conspiracy everywhere. The reason no one listened to House Banking Committee Chairman Henry B. Gonzalez (D-Tex.) about the ~~XL~~ mess had less to do with, as Greider sees it, a "lonely congressman arrayed against an army of authorities" than with Gonzalez' reputation as a crank. And if the White House as Greider claims, has become an invincible power vortex, why are modern Presidents so bad at getting things done?

At the same time, Greider's view of the good old days is several shades too rosy. He's unrealistically shocked that Americans are obsessed with money and hate politicians and that the elite don't care about ordinary folk. Moreover, the democracy Greider pines for shows signs of still being out there. This year's anti-incumbency wave is one such sign.

Still, for anyone who worries about democracy's future, Greider has fast-told a comprehensive and compelling story. If you're convinced that something has gone wrong, *Who Will Tell the People* offers a fresh and satisfying exploration of just what it is.

BY DOUGLAS HARBRECHT

Washington Correspondent Harbrecht covers politics for this magazine.



BRINGING INFORMATION TECHNOLOGY DOWN TO EARTH

DMR understands that business drives technology.

That's why we are known for effecting the kind of sensible evolution to flexible, practical and viable systems that make businesses hum. It's why we have become one of the foremost international providers of information technology services to business and public enterprise. We focus on strategy, architecture, productivity and the benefits associated with aligning information technology with business needs. We deliver innovative solutions that emphasize standards-based and open technology environments. We stress knowledge, skills and technology transfer for the real world. DMR: the seasoned, practical partners in Era 2 IT evolution... the experts with the down-to-earth solutions.



When know-how counts

1-800-398-5158 U.S.A. • CANADA • AUSTRALIA • U.K. • BELGIUM • NETHERLANDS • GERMANY • SWITZERLAND

Where will your business More to the point, where your business tomorrow?

The first answer is on your calendar, of course.

The second answer is more elusive, perhaps.

If you're running a major corporation, you're trying to work out your corporate strategies in the face of an uncertain economy, intensified competition, changing consumer attitudes, shifting fiscal policies and capricious financial resources.

And the more global your corporate perspective is, the harder it has to be to shape future plans as the world's political, economic and sociological orders convulse.

Inevitably, decision-making at the top still depends in a large measure on what you yourself see and hear and understand. That suggests that one of the ways executives try to find tomorrow's directions is to get out there, see things with their own eyes, and become involved face-to-face with real-time situations and real, live people whose input they want and need.

So if you're doing that, great.

If you're doing it with a company airplane, that's even better.

You know from experience how much more you can accomplish by using your own corporate aircraft instead of the airlines. You know how it helps you make the best use you can of two things you never seem to have enough of—your time and energies.

And maybe—just maybe—you also know that your travel requirements are outgrowing your present airplane. It happens.

If it's happening to you, let's get together and at least talk about the Gulfstream IV.

We know the Gulfstream IV isn't the appropriate airplane for every organization.

It is, after all, a business jet with a well-deserved reputation for being the finest aircraft of its type. It has a combination of range, speed, size and flight management technology that results in operating



ake you today? o you plan to take

capabilities you find only in the newest generation of airliners. And we can't hide the fact that owning one takes a substantial investment.

But for corporations—and governments, too—that want or need the performance the Gulfstream IV puts at their disposal, this amazing airplane can return significant dividends in terms of its versatility and productivity.

Consider your own situation.

When you need to go to different continents, the Gulfstream IV can take you and your key executives nearly 5,000 miles non-stop in about 9 hours. Global access with uncompromised timeliness, convenience and security is a Gulfstream tradition.

When you need to go to places where airlines don't go often or at all, the Gulfstream IV can take you to several in a single day and still get you home in time for supper.

It's like having two airplanes in one.

And however you use it, the Gulfstream IV brings unequalled passenger comfort, engine reliability and systems dependability to every trip it flies.

If you've come this far with us, you have to be the kind of executive that doesn't overlook any opportunity to improve your company's chances of being and staying a major player.

So take us up on our invitation to talk about the Gulfstream IV. Better still, let us take you and your key executives on a full scale business trip you have to make somewhere, at home or abroad. Robert H. Cooper, Senior Vice President, Gulfstream Marketing, would be delighted to discuss the idea with you, and he's easy to get in touch with at (912) 964-3234.

You see, we think just like you do.

When it comes to a decision about the Gulfstream IV, nothing takes the place of being there and seeing things for yourself.



The Gulfstream IV.

*Uncommonly versatile,
uncommonly productive.*



THE MYTH OF INDUSTRIAL POLICY

BY GARY S. BECKER



You don't have to look far to find examples of state sponsorship that are struggling or have failed: Synfuels Corp. immediately springs to mind

A bandwagon is getting rolling in the U.S. for a new type of industrial policy that involves government subsidies for early development of technologies that can help America compete in the global marketplace. But I doubt whether the public sector will do a good job of directing applied research toward projects with commercial value. Entrepreneurs and investors should risk their own money, not taxpayers', in the competition to work up profitable technologies.

The fascination with technology policy has gained support from a recent report, *The Government Role in Civilian Technology*. In it, a panel created by the prestigious National Academy of Sciences recommends, among other things, that the federal government establish a "civilian technology corporation" to support applied projects at an early stage. I am a member of the academy but disagree with the recommendation, although the panel's discussion is more judicious than most treatments of this subject.

I believe that state sponsorship of technologies is doomed to fail, because it encourages companies and industries that have new projects to compete in the political arena for taxpayers' assistance. Politicians will become advocates of pet projects, and bureaucrats will shy away from other ventures that have long lead times.

ASIAN MODELS. The Western world's experience with state efforts to promote novel technologies offers little support for such an industrial policy. In 1980, several years after the oil-price shock, the U.S. set up the Synfuels Corp. to develop synthetic fuels to replace oil and other fossil fuels. But Congress had not anticipated the sharp fall in oil prices and the politics involved in supporting alternative fuels. The corporation quietly went out of business in 1986.

Britain, France, and Germany, together poured billions into Airbus Industrie to help raise their technological base for the production of advanced aircraft. After years of turning in losses, Airbus is finally managing to sell a reasonable number of planes, but it is doubtful whether this has done much for the technological base of these countries. This joint venture came after the ill-conceived Concorde supersonic project sponsored by the French and British.

We are told by advocates of the new industrial policy to disregard these and other failures and to look instead to Asian countries for models. Singapore is singled out for praise for the central direction of its economy toward state-of-the-art technology. No one can doubt that its performance since the late 1950s

has been remarkable in many ways, with an annual growth in per capita income that averaged more than 6%.

Singapore started building a manufacturing base in the late 1950s with simple textiles but then rapidly upgraded—first to elementary electronics, including radio and TV production, then to advanced electronics involving computer chips. In recent years, Singapore has gained a major world position in international financial markets and is now targeting the biotech industry.

SWEET TALK. This rapid change in product mix was orchestrated by an explicit government policy of promoting advanced technologies through liberal subsidies to foreign companies in targeted industries. The government gave long tax holidays and low tax rates, controlled the unions and industrial disputes, and provided many other inducements.

Yet behind Singapore's glittering numbers and fancy industries is a bottom line that is not so impressive: In a recent study, economist Alwyn Young of Massachusetts Institute of Technology shows that Singapore has had almost no productivity gains in overall output of manufactured goods since 1960. The rapid growth of per capita income came almost entirely from an expansion of its capital stock, resulting from the generous subsidies to foreign corporations that invested there. These companies did very well but left little imprint on the economy's productivity.

Hong Kong, Asia's other trading entrepôt, had no industrial policy but experienced equally rapid growth in per capita income. Young shows that even without such a policy, Hong Kong had spectacular expansion in productivity and in domestic manufacturing companies.

No one advocates the new industrial policy without citing Japan. But private industry in Japan supplies more than 70% of the funds spent on research and development, which exceeds the private sector's share in Britain, France, or the U.S. I believe that the role of the Ministry of International Trade & Industry and other government bodies in directing and advancing technological developments in Japan has been enormously exaggerated. The Japanese government has no more orchestrated the productivity advance there than it has rigged prices on the Tokyo Stock Exchange.

The new industrial policy is the latest fad in the many proposals to give governments a bigger role in promoting economic development. We shouldn't be taken in by the sweet talk: Public support of R&D should concentrate on basic research without commercial value, while the private sector should finance and develop profitable technologies.

GARY S. BECKER IS PROFESSOR OF ECONOMICS AT THE UNIVERSITY OF CHICAGO AND A FELLOW OF THE HOOVER INSTITUTION.



THE CHRONOGRAPH OF THE '50's. IN TIME FOR THE '90's.

The classic Movado Chronograph of the 1950's is a watch not only well-remembered, but still sought after.

Today, this legacy in watchmaking has inspired the new Movado Chronograph 1950.

Each of these ingenious timepieces displays eight timing functions: the hour, minute and second hands; a date indicator, and chrono seconds, minutes, 12-hour and 1/10 second recorders.

The bezel tachymeter measures speed over time. Easy access pushbuttons start the stopwatch and split time functions.

Added to the Movado heritage of over a century of Swiss craftsmanship, is the newest quartz-accurate movement and a case that's water-tight to 99 feet.

The new Movado Chronograph. Right, now.

MOVADO
CHRONOGRAPH 1950

\$950 as shown. Also available in all stainless steel or with sharkskin strap.

BAILEY BANKS & BIDDLE

Creating borders in Word for Windows was easy for test participants—they simply chose the easy-to-locate "Border" command.

Exotic Excursions
23 Cajun Court
New Orleans, LA 36857

May 15, 1992

Steve Sullivan
8762 W. 180th Pl.
San Diego, CA 90834

Dear Steve:

During the past two years Exotic Excursions has seen a record 200% growth in revenues. This success has been exciting, but we now must adjust for our very fast growth. The size of our office impedes proper customer service and is inadequate for the increased level of store traffic.

- I propose that we open another Exotic Excursions office, since our phenomenal growth of the past three years is likely to continue.
- **Thousands of potential clients will attend the grand opening of the new Exotic Excursions office.**

My staff are currently inspecting some potential locations in the Bay Court Plaza. Rental agents have told us that almost 10,000 people pass through this retail space weekly on their way to offices, restaurants, and shops. The table below shows cost projections for three different space configurations.

Location	Floor	Meeting	Bath	Street	Cost/Sq.
Court A	4500	N	Y	Main	\$2100
Court B	2100	N	N	Main	\$590
Court C	3400	Y	Y	52nd	\$1000

Word for Windows has an on-screen "Tables" function that lets you add rows almost instantly.

I recommend that we lease the Court C location. This is substantially...

Exotic Excursions
23 Cajun Court
New Orleans, LA 36857

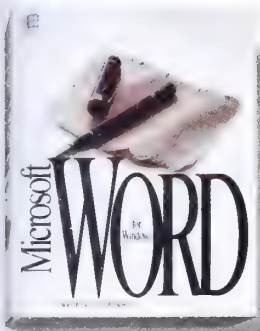
Steve Sullivan
8762 W. 180th Pl.
San Diego, CA 90834



Printing envelopes? Easy. We mean REAL easy. There's an envelope command right on the screen that addresses and prints automatically.

When given this simple letter to revise, WordPerfect for DOS users were impressed at how easy it was to perform everyday word processing tasks using Microsoft Word for Windows 2.0.

No wonder WordPerfect users prefer Word for Windows. It has easy written all over it.



In a recent test conducted by the National Software Testing Labs (NSTL), nearly eight out of 10 WordPerfect® for DOS users preferred Microsoft® Word for

Windows™ 2.0 over WordPerfect for Windows. The reasons were plenty.

They were amazed at how Word for Windows put them one step away from accomplishing everyday word processing tasks with, in many cases, one simple click of the mouse. Which may have surprised them. But it didn't surprise us. After all, we designed Word for Windows around them.

Every week during the development of Word for Windows, we invited WordPerfect users to bring in their letters, memos, or whatever business documents they use in their own jobs, and try them out using Word for Windows. Our Product Development people at

Microsoft called these sessions "usability studies." Which is just a fancy, shorter way of saying "what-do-people-use-a-word-processor-for-and-how-can-we-make-it-easier-for-them-to-use-it."

These studies not only helped us to design features that make everyday tasks easier, but helped us to make the more advanced word processing features like grammar checking, drawing and charting, easier to use as well.

Call for a free "Word Challenge Kit." Included is a videocassette highlighting the test, and interviews with WordPerfect users who took the challenge. Also in the kit are the files you need to test Word on your own. Call (800) 323-3577, Department Y78. We think once you judge for yourself, you'll want to take advantage of our special \$129 upgrade offer.* Then, no doubt, you'll end up spreading the word for us.

Microsoft®
Making it easier

*Offer good for current licensees of WordPerfect, MultiMate, WordStar, MS Word for MS-DOS and DisplayWrite. Please allow 2-4 weeks for delivery upon receipt of order by Microsoft. Offer expires 6/30/92. Limit one per customer. Reseller prices may vary. Call for system requirements. Offer good only in the 50 United States. To receive only the NSTL test results: In the United States, call (800) 323-3577, Dept. Y78. For information only: In Canada, call (800) 563-9048, outside the U.S. and Canada, call (206) 936-8661. © 1992 Microsoft Corporation. All rights reserved. Printed in the USA. Microsoft, MS, and MS-DOS are registered trademarks and Windows is a trademark of Microsoft Corporation. WordPerfect is a registered trademark of WordPerfect Corp.

Economic Trends

BY GENE KORETZ

THE PROFIT SURGE SEEMS TO BE GAINING STRENGTH...

There's more than a small chance that Corporate America's profit performance this year could be significantly stronger than anticipated a few months ago. One hopeful sign is the upbeat tone of first-quarter profit reports. Only a few weeks ago, it appeared that the profits of publicly held companies would post a collective 5% rise over their year-earlier level. Now, BUSINESS WEEK's survey of 900 companies indicates that reported profits before extraordinary items were up 7% last quarter.

The pickup is clearly gathering steam. According to Commerce Dept. data, operating profits, or corporate profits adjusted for inventory changes and excess

for the April payment in half a decade and the biggest percentage gain since 1989," notes economist William Sullivan Jr. of Dean Witter Reynolds Inc.

Several factors lie behind the improving profit picture. Debt-servicing costs are down as a result of debt reductions, refinancing, and falling interest rates. Corporate restructuring and cost-cutting have produced leaner, more productive work forces: Smith Barney's Gieber calculates that nonfarm private-sector productivity rose at a 2.3% annual rate last quarter. And as costs have been cut, a lid has been kept on wage inflation.

The annual pace of gains in compensation, for example, has fallen to a mere 3.1% over the past year, and average hourly earnings at last count were running just 2.5% above their year-earlier level. Major collective-bargaining settlements concluded in the first quarter called for average wage increases of only 3% a year over the contract periods, compared with 3.2% in the contracts they were replacing.

All this bodes well for a profit recovery. As Gieber puts it: "If profits can advance smartly during a period when volume growth is lackluster and business lacks the ability to boost prices meaningfully, what will happen when the recovery accelerates and volume gains allow even better pricing power?"

His answer: a 17% rise in operating profits for the Standard & Poor's 500 this year. That rise, plus a sharp drop in write-offs, which depressed S&P 500 earnings last year, translates into a total profit gain of close to 50%.

IS THE ECONOMY GROWING RAVENOUS FOR IMPORTS?

The merchandise trade deficit, which shrank to \$3.4 billion in February, lowest monthly level in nine years, about to move higher. That's what suggested by Mitsubishi Bank's late-month survey of airfreight carrier seaport officials, and trucking firm around the nation regarding export and import business trends.

Although the survey's index of current export business rose by 1.6% March, its current import-condition index soared by 23.5%, reversing a four-month decline. Survey results, say the bank's economists, suggest that the recovery is sucking in more imports and that the monthly trade gap will widen about \$6.1 billion by yearend.

CAR SALES SEEM TEPID—BUT CHECK OUT THOSE VANS AND TRUCKS

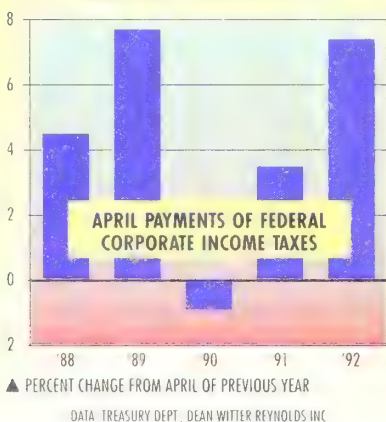
This year's motor-vehicle sales are off to a significantly better start than last year's. So argues Robert Marks of SOM Economics Inc.

According to the Commerce Dept. seasonally adjusted sales of domestic-produced autos through April clocked in at an average 6.01 million-unit annual pace, an increase of only 0.7% over the year-earlier rate. Marks notes, however, that unadjusted data show an increase of 2.6% for the four-month period—a difference equivalent to some 115,000 annual car sales. "The government's numbers are misleading," he claims, "because they seasonally adjust sales data, which no longer have the degree of seasonality they had earlier in the postwar period."

More important, says Marks, is the inadequate attention paid to domestic trucks, including minivans and sports utility vehicles as well as traditional vans, pickups, and heavier trucks. Such truck sales, which are not seasonally adjusted, now account for 31.5% of domestic motor-vehicle sales, compared with 27% four years ago. And they are nearly 16.5% ahead of their year-earlier pace.

The upshot is that total domestic vehicle sales now are running some 7.5% over 1991. And while that rise is below traditional recovery magnitudes, Marks notes that "it is generating production and income increases for vehicle producers that will ripple through supplier industries and the economy."

CORPORATE INCOME TAXES ARE ON THE REBOUND



depreciation, posted their fourth consecutive quarterly increase in the final quarter of last year and were up nearly 7% over their cyclical low. While Commerce won't release profit numbers for the first quarter of this year until the end of May, economist Gregory Gieber of Smith Barney & Co. says that the government's advance report on first-quarter gross domestic product implies that operating profits were running a handsome 14% above their pace in the first quarter of 1991.

The hardest evidence of the profit surge is the latest report on corporate income tax payments to Uncle Sam (chart). Even with companies' efforts to minimize their tax burdens, the April tax take, which reflects corporate estimates of first-quarter liabilities, was up \$1.1 billion, or 7.4%, from its year-earlier level. "That's the largest dollar increase

...BUT THE RECOVERY MAY PAUSE FOR BREATH

Don't be surprised if the economy's first-quarter growth rate is revised significantly upward. Economist Bruce Steinberg of Merrill Lynch & Co. notes that recently released data suggest that the economy may have expanded at close to a 3% annual clip, rather than the sluggish 2% rate initially reported.

The catch is that the faster pace actually reduces the chances of a meaningful acceleration in the current quarter. Although some of the upward revision reflects somewhat stronger nonresidential construction and capital-equipment outlays than originally reported, the biggest change is in manufacturing inventories, which turned out to be higher than assumed. That reduces the degree of first-quarter inventory liquidation and lessens the need to boost output to restock inventories as the recovery quickens.

INFLATION MAY BE A NO-SHOW IN THIS RECOVERY

Thanks to the April inflation reports, the bond market is beginning to understand that it has nothing to fear from a moderately paced recovery. If future price data continue to pound the lesson home, as appears likely, low inflation will lay the groundwork for a lasting upturn that will take upward pressure off long-term interest rates and the unemployment rate.

The latest data make the case. The credit markets reacted favorably to the modest April increases of 0.2% in both the producer price index (PPI) and the consumer price index (CPI). The rate on 30-year Treasury bonds fell to 7.85% on May 13, on the heels of a larger-than-expected jump in April payrolls and a healthy gain in April retail sales. The numbers on jobs and retail buying were the best signs yet that a modest but sustainable recovery is under way, while the price data show that inflation is under control—and likely to remain so.

The core rates of inflation, measured by both the CPI and the PPI, reveal the fundamentally subdued nature of prices (chart). Excluding the ups and downs in energy and food costs, which can distort inflation's true trend, the CPI rose 0.3% in April—up only 3.9% from a year ago. Yearly core inflation has been under 4% for four months in a row—something that hasn't happened in more than five years. Inflation for the core PPI is running at a four-year low, and no price pressures are building at the earlier stages of production.

The April CPI report looked a lot better than the one in March, when both the total CPI and core inflation rose by 0.5%. But food prices were flat last month, after a spike in March. And apparel costs fell back in April, following March's larger-than-normal gain. Housing costs also moderated in April. That's important since the cost of housing accounts for more than 40% of the overall CPI.

LITTLE PRESSURE ON WAGES AND PRICES

The arguments for continued low inflation are strong and numerous. The most important: For the past three years, the economy has been growing some two percentage points below its long-term potential of about 2.5%. That figure is the sum of the growth rates of the labor force and productivity, and it's the pace at which an economy can grow without fueling inflation. This stagnation has wrung out nearly all of the economy's latent price pressures, and it will take a long time for a

mild recovery to generate any new heat under inflation.

Moreover, the wage-price spiral continues to unwind. The pace of wage growth is at a four-year low, and it isn't likely to pick up amid widespread cost-cutting and corporate restructuring. The combination of slow wage growth and the cyclical pickup in productivity that typically accompanies a recovery will restrain the growth of unit labor costs. And it's unit costs that influence prices.

Also, manufacturers still have plenty of idle capacity, so there are no production or distribution bottlenecks to provide the climate for price hikes. Indeed, price wars continue to break out. And last, but far from least, the Federal Reserve is committed to low inflation.

The bond market's expectations of inflation are one factor that has kept long-term interest rates high. In fact, the spread between long and short rates is exceptionally wide. However, the market's fears seem unjustified. More price data like April's will allow inflation expectations—and long-term rates—to adjust downward.

LABOR MARKETS LOOK STRONGER

The good news for consumers is that inflation will stay low as jobs and incomes begin to pick up, which will provide a firm foundation for consumer spending.

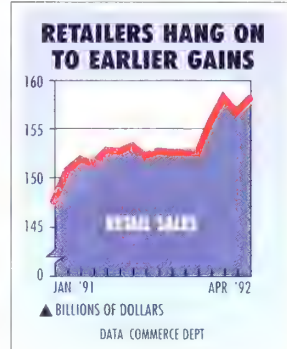
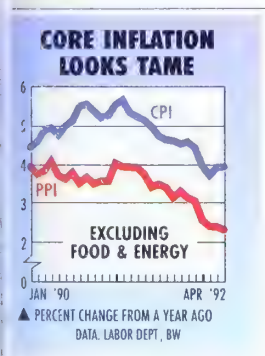
Retail sales continued to cruise at a high altitude in April (chart). They jumped 0.9%, following a 1% drop in March. A late Easter robbed sales from March, but exaggerated April receipts. Still, retailers are maintaining the lofty sales levels they had reached in February, when buying soared 1.6%, after a 2.1% surge in January.

Even after those big gains, which lifted first-quarter retail sales by an 11.8% annual rate, sales began the second quarter at a 3.1% rate above their first-quarter level. This pattern suggests that consumer buying will continue to add support to economic growth this quarter—but at a more modest pace.

Better job growth will help consumer buying stay on track.

The latest employment report was one of the more positive to come out of the Labor Dept. in a long time. To be sure, job growth isn't exploding, but the labor markets are finally showing more strength.

In April, nonfarm payrolls rose by 126,000 jobs—the most in 11 months. And Labor's survey of households—which asks workers, not employers, about jobs—showed a gain of 327,000 new jobs in April, following a 305,000



Business Outlook

advance in March. Early in a recovery, the household data tend to lead the payroll numbers, so another healthy gain in May payrolls could be in the works.

More good news: 55.2% of 356 industries added workers last month (chart). Hiring was the broadest in more than two years, and it suggests that the need for labor is picking up economywide. Indeed, last month's jobless rate fell to 7.2% from 7.3% in March.



The trend in part-time work also suggests rising labor demand. The number of people who could find only part-time work fell by 227,000 last month and has dropped by 519,000 since January. This means that companies are extending work time to meet increased demand for their products. And as demand picks up further, companies will hire more employees.

That process already seems to be starting in manufacturing. The factory workweek has stayed at a long 41.1 hours since February, and in April, overtime rose to four hours a week. That's up from 3.7 hours in March, and it's the most factory overtime in three years.

With existing workers putting in so many hours, factories are finally hiring again, adding 8,000 employees in April. While that gain was small, it was the third consecutive advance. Manufacturers haven't added workers for three months in a row since the end of 1988.

STILL, JOB GROWTH ISN'T STELLAR

The employment report also highlighted some snags that will restrain the recovery. Most important, job growth today is nowhere near its performance in the first year of past recoveries, when payroll gains averaged 190,000 jobs per month and gains of 300,000 or more in any one month were common. Seeking to protect their

bottom lines, companies will remain cautious about costly additions to their payrolls.

And the pickup in hiring did not translate to any gains in nonfarm wages, which fell 1¢, to an average of \$10.54 per hour in April. During the past year, hourly pay is up just 2.5%—the slowest wage growth in nearly four years. While that's good reason to bet against any pickup in inflation, slow wage gains will also put the brakes on any rapid acceleration in consumer spending.

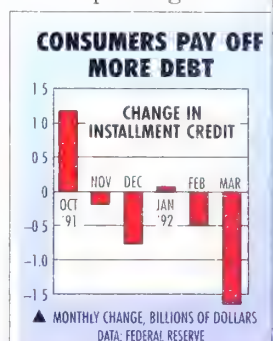
Moreover, because the nonfarm workweek fell by six minutes, to 34.4 hours, average weekly pay dropped by 0.4%, to \$362.58. Skimpier paychecks suggest a weak showing for personal income in April.

Still, households are in better financial shape now than they were a year ago. Weekly earnings are up 3.7% from a year ago, more than the overall CPI.

In addition, consumers have improved their balance sheets, either by refinancing debts, especially home mortgages, or by keeping their credit cards locked up.

Consumers cut their installment-credit levels by \$1.6 billion in March (chart). As a result, credit outstanding as a percent of consumers' disposable income slipped to 16.6% in March—the smallest debt share in seven years. Easier monthly mortgage payments plus lower debt levels are why consumers can lead this economy into recovery even with slow job and income growth.

Of course, debt-shy consumers won't be very extravagant in this upturn. But that's good, because the restraint on spending will squash any demand-driven runup in prices. Bond traders remain a band of doubting Thomases on the prospects of low inflation in a recovery. But given a few more tame-looking price reports, even they may yet become believers.



THE WEEK AHEAD

HOUSING STARTS

Tuesday, May 19, 8:30 a.m.

Housing starts probably fell slightly, to an annual rate of 1.3 million in April from 1.36 million in March, says the consensus of economists surveyed by MMS International, a division of McGraw-Hill Inc. However, the drop may be even greater because most of the gain in March was in multi-unit construction, which jumped by 63%, to a 212,000 rate, despite the oversupply of such housing in most regions. If apartment starts fell back to a more sustainable level of about 150,000, total housing starts likely declined to an annual rate of 1.25 million in April. In addition, mortgage applications for home purchases were down in

April, suggesting that home sales were weak for the month.

MERCHANDISE TRADE DEFICIT

Wednesday, May 20, 8:30 a.m.

The foreign trade gap in March is expected to have widened to about \$4.6 billion from February's surprisingly low \$3.4 billion. Exports likely fell to \$37 billion after jumping 6.8% in February to a record \$37.8 billion. Much of the February jump came from aircraft shipments. Imports, down 0.4% in February, increased slightly, say MMS economists.

INITIAL UNEMPLOYMENT CLAIMS

Thursday, May 21, 8:30 a.m.

New filings for state unemployment-insurance benefits may have dropped to

an annual rate of about 405,000 for the week ended May 9. That would be down from the 415,000 filed in the week of Apr. 25. Claims have been falling since March, and another decline in early May would suggest an increase in job growth this month.

FEDERAL BUDGET

Thursday, May 21, 2:15 p.m.

The U.S. government will probably post a surplus of about \$25 billion for April as an increase in income-tax payments due by Apr. 15 outpaced the continued rise in government outlays. However, the expected surplus would be the lowest April overflow in four years. In April, 1991, the federal budget was \$3 billion in the black.

People or beans?

There's only one possible answer. Both. With traditional medical costs soaring 20% a year, stemming the tide is essential.

But doing it at the expense of human needs is unacceptable; it's also counterproductive. Because the fact is, it simply doesn't work.

We've found that controlling costs while maintaining the quality

of care aren't mutually irreconcilable goals, but in fact go hand in hand.

And when they do, everyone stands to gain.

Accordingly, the aim of each and every managed care program we offer is quality.

To that end, we have provider credentialing programs, operate utilization and quality management programs, and continually monitor patient satisfaction.

Recently, for example, 94% of the members

enrolled in our healthplan rated their physicians highly. We believe that no company should be forced to choose between human needs and financial needs.

To help you satisfy both, we have created one of the most extensive health care networks in the country. For literature, call CIGNA Employee Benefits Companies, 1-800-782-0782.

And talk to the people who really know how to use their bean.



We get paid for results.®





TRADE

MAY 25, 1992

BUILDING FREE TRADE BLOC BY BLOC

TREATIES LIKE NORTH AMERICA'S COULD ECLIPSE GATT

When United Flight 1002 bounced to a landing at Dulles International Airport on the afternoon of May 2, groans mixed with cheers throughout the cabin. Nearly all of the passengers were U.S. officials returning home from a week of intensive trade negotiations in Mexico City. Fourteen-hour workdays and local cuisine had taken their toll: A week later, some were still too weak to climb on another plane to Toronto. The conclusion of ambitious negotiations linking the U.S., Canada, and Mexico into the world's largest free-trade zone had to be put off a little longer.

No matter. Despite grumblings on

Capitol Hill, the talks on a North American Free Trade Agreement (NAFTA) are suddenly moving so fast that a summer-time deal is almost inevitable. The discussions, which ultimately could boost U.S. exports by \$10 billion, have resulted in tentative agreements on major provisions—from tough content rules to the deregulation of cross-border truck traffic.

NORTHERN EXPOSURE. Negotiators from Canada and the U.S. say the breakthrough came when Mexican officials began cutting deals that seemed virtually impossible just weeks ago. "The Mexicans realized we are at the 11th hour in the talks, and they began asking what

they had to do to close the deal," says one senior Bush Administration official. Their incentive: The pact will expand Canada-Mexico trade by 30% by 1995 and add 600,000 jobs to Mexico, according to an Institute for International Economics study.

Mexico now seems willing to accept, for instance, a crucial provision that any cars assembled in North America would have to have a 60% regional parts and labor content to qualify for duty-free treatment—although auto makers may be able to count such costs as executive salaries, employee uniforms, and advertising toward local content (table). Mexico and Canada, both eager for continued

Japanese investment, initially had resisted the strict origin requirement.

As U.S. negotiators straggled into Toronto to tie up the loose ends, Canadian Prime Minister Brian Mulroney was preparing for a May 20 White House meeting with President Bush and a trek to Capitol Hill the next day. Despite polls showing that just 4% of Canadians approve of the current U.S.-Canada free-trade pact, Mulroney is willing to sign the broad deal.

His motive: the hope that such an agreement will pull the Canadian economy out of its two-year-old slump. Mulroney sees Mexico as a prime market for Canadian telecommunications and mining equipment, and the NAFTA as a way to update Canada's four-year-old free-trade agreement with the U.S.

BLOTTED GATT. Meanwhile, the NAFTA euphoria has all but blotted out the slow collapse of the granddaddy of all trade negotiations: the 19-year-old, 108-nation General Agreement on Tariffs & Trade (GATT) talks in Geneva. Meant to cool all the world's protectionist fevers in the broad stroke, the negotiations have been the Bush White House's top trade priority. But Europe's refusal to cut \$45 billion in yearly farm subsidies has earned many Third World nations and exporters of agricultural goods against the pact. The Administration has asserted that a new GATT treaty would boost world trade by \$5 trillion over a decade. That, says U.S. Trade Representative Carla A. Hills, is like giving every American family of four a check for \$17,000 payable over 10 years. Warnings of a failure are equally hyperbolic. "The worldwide trading system as we know it will collapse," warns Dexter Baker, chairman of the National Association of Manufacturers. Once the genie of trade wars is out of the bottle, the cost will be in the tens of billions of dollars."

Both the hopes and fears are exaggerated. The failure of global trade talks could not scrap the current rules of GATT, under which worldwide trade has nearly doubled in the past 10 years. Besides, trade liberalization continues out-

side GATT in the form of regional agreements. Latin American nations are anxious to piggyback onto NAFTA once it is ratified, and a free-trade zone stretching from the Arctic to Tierra del Fuego by the end of the decade is not out of the question. Eastern Europe and Scandinavia are candidates for inclusion in the 12-member European Community, whose trading rules are being liberalized. And a large, informal Asian trading bloc, with Japan as its core, is a growing reality.

Academics once warned that the rise of such regional agreements would

Ways & Means Chairman Dan Rostenkowski (D-Ill.). The election-year measure sweeps up half a dozen tough trade initiatives and is likely to pass the House this summer. Democrats see the bill as a way to draw an election-year distinction between the "free-trade" Administration and the "fair-trade" Congress.

Some provisions have broad support, including a measure to computerize the U.S. Customs Service's recordkeeping. Other provisions would require the Administration to get tougher with nations that exclude U.S. goods outright or that violate existing trade agreements.

But the bill does have some blatantly protectionist components. One aims to freeze the number of Japanese cars sold in the U.S. for seven years. It would even apply to cars assembled in the U.S. by Japanese subsidiaries.

AIRBUS ATTACK. Few expect such extreme provisions to turn into law. But the trade bill marks a growing determination in Congress—even among Republicans—to take charge of trade issues. When the Administration announced a tentative agreement limiting European government subsidies to Airbus Industries recently, Senator John Danforth (R-Mo.) helped lead the attack on the pact.

Ultimately, the legislators' newfound interest in trade bodes ill for congressional ratification of the final NAFTA treaty—at least this year. Although Bill Clinton supports NAFTA in principle, Democrats are likely to bottle up

any agreement submitted to Congress in 1992, focusing on fears that it will move jobs to low-wage Mexico. In a year when smoldering inner cities are already suffering from the flight of high-wage factory jobs abroad, that argument is tough to counter.

But failure to ratify a pact before Congress hits the campaign trail would only be a temporary setback. Barring a major upheaval in the November election, the next Congress likely will ratify the pact. And rather than being the harbinger of a world divided into regional fortresses, NAFTA may mark the start of a major liberalization of world trade.

By Paul Magnusson in Washington



THE NORTH AMERICAN TRADE TALKS: PROGRESS AT LAST

The pact won't be signed for weeks, and plenty of horse-trading is still going on. But Canada, Mexico, and the U.S. are close to agreement on these key points:

RULES OF ORIGIN

The three agree that autos must have 60% North American content. But that could include such costs as royalties to parent auto makers in Japan and Europe

For personal computers, two of three main parts would have to be made in North America. For laptops, content rules would require North American-made screens

TRANSPORT

Mexico agrees that U.S. and Canadian trucks will be allowed to operate freely in Mexico

OIL

Mexico proposes that after five years, U.S. and Canadian companies could set up filling stations, now a monopoly of Pemex, the state oil company

PETROCHEMICALS

Pemex proposes locating plants along the Gulf of Mexico to create a 1,200-mile petrochemical corridor, from Baton Rouge to southern Veracruz



carve the world into a set of warring, protectionist trade blocs. One fear was that trading groups would steer local customers away from low-cost producers outside the region toward low-tariff producers within the bloc. Instead, regional pacts have spread the philosophy of freer trade by showing how increased local trade leads to economic growth. "Global liberalization may be best," says World Bank Chief Economist Lawrence H. Summers. "But regional liberalization is very likely to be good."

There is a danger in the collapse of GATT: It might encourage protectionist forces, especially in the U.S. Take the trade bill introduced on May 7 by House

Commentary/by Howard Gleckman

HOW TO BALANCE THE BUDGET? JUST DO IT

Congress is about to approve a constitutional amendment requiring a balanced federal budget. At first glance, the idea seems both simple and long overdue. Balance the budget within five years, no excuses. If the states can do it, why not the feds?

Yet Congress' most hard-line budget hawks—lawmakers who have struggled for the past decade to control the deficit—are deeply skeptical. One calls the amendment “absolute B.S., the ultimate in feel-good budgeting and do-nothing politics.”

One reason they're so troubled is that most states don't really balance their budgets. By some estimates, more than half of all state spending is exempt from constitutional requirements. Those expenses are shifted to a raft of special districts or designated “capital” spending items. And since state and local governments have sold more than \$200 billion in new bonds in the past year, balanced-budget requirements clearly haven't stopped deficit spending.

But that's not the only reason for doubt. The amendment, which would have to be ratified by three-quarters of the states, has become popular in a year when both Congress and the White House have sunk to new lows of fiscal irresponsibility. The \$1.5 trillion federal budget will post a deficit topping \$350 billion this year. Yet in March, President Bush vetoed a revenue bill because Congress tried to pay for new tax breaks with tax hikes. Now, Congress and the White House have agreed to borrow an additional \$800 million to help rebuild riot-ravaged Los Angeles and flood-damaged Chicago.

BLOODBATH. That, of course, is exactly what is wrong with the proposed amendment. While Congress and the President fall all over themselves embracing a constitutional ban on deficit spending, they won't do what's really

needed to stop the flow of red ink: cutting spending and raising taxes.

The last time they tried, in 1990, Bush and Congress shed gallons of blood before agreeing to a five-year, \$500 billion deficit-cutting plan. So far, just over half of the promised savings has been achieved. But Bush now calls the package, which included a tax increase, his biggest mistake. And there is real doubt about where the remain-

al Park Service; and slash defense spending by 40% beyond the sharp cuts already agreed to.

Those measures would yield only about half the needed savings. The rest would have to come from tax hikes, which might mean raising rates for individuals by a percentage point and imposing a 5% value-added tax on all goods and services except food, housing, and medical care.

All that would be agonizing and could well mean five more years of economic stagnation. But without such moves, the amendment won't be worth the parchment it's printed on.

GRIDLOCK. That's not to say the deficit shouldn't be cut. Today, more than \$200 billion in tax revenues goes to pay interest on the debt. That's a massive transfer of wealth from the middle class to the wealthy and means that billions that could be invested in the U.S. end up overseas. Worse, the deficit debate has thrown the government into gridlock.

But an amendment mandating cuts that Congress and the President have no stomach for—and that might be economically counterproductive in the short term—debases the Constitution. After a decade of buck-

passing and gamesmanship, the politicians should have learned this: No legislative fiat can substitute for political will. Two versions of Gramm-Rudman, a gaggle of budget summits, and a National Economic Commission failed because the President and Congress wouldn't swallow strong medicine.

One of these days, the nation's leaders will have to get together and tackle the deficit. But a balanced-budget amendment is a mirage. For many lawmakers, it is just a cop-out, a way to delay for five more years the inevitable choices. If they want to get the budget under control, they should “just do it”—and leave the Constitution alone.



ing \$240 billion is going to come from. Even so, Congress and Bush are now blissfully backing a constitutional amendment that would mandate not only those deficit reductions but also hundreds of billions of dollars more.

Indeed, really balancing the budget will require more than \$800 billion worth of agonizing political decisions. Just imagine: Congress could curtail for five years all cost-of-living increases for Social Security, medicare, medicaid, aid to poor families, veterans benefits, and farm programs; freeze for five years spending for all other domestic programs, from the Federal Bureau of Investigation to the Nation-



IS RALLY'S BURGER OUTLET IS PROSPERING IN A CAMDEN (N.J.) ENTERPRISE ZONE

ENTERPRISE ZONES: DO THEY REALLY WORK?

Tax breaks to lure business to the inner city are getting a fresh look

Conservatives have said for a decade that inner cities could be rejuvenated the way the character Ray Anselma drew baseball crowds to his farm in the movie *Field of Dreams*. The urban solution: Give businesses tax breaks, and they will come.

Now, in the wake of the Los Angeles riots, the "enterprise zones" notion is moving out of right field. Suddenly, much of Washington is working on a plan to sweeten existing, state-sponsored enterprise programs with federal tax breaks. The aim is to create jobs by providing tax relief to businesses that settle in the desolate areas.

LIGHT INDUSTRY. The program has long been popular outside of Washington: Since 1982, 38 states have created 600 enterprise zones in blighted inner-city neighborhoods. Phoenix Lighting Products Corp., a manufacturer of lighting equipment on Chicago's depressed West Side, opened its doors four years ago with the help of a 57% reduction in state and local taxes. Says co-owner David Lesse: "It would have been really tough to make it without the enterprise zone." But experts believe that few businesses will want to move into troubled neighborhoods—even if federal aid is available. "The additional cost of doing business in these communities is significant enough that tax incentives alone can't offset the cost of insurance, security, and the ability to recruit a skilled

work force," says Chris Walker, a researcher at the Urban Institute, a Washington think tank.

Indeed, several studies indicate that many companies consider variables such as infrastructure and access to markets more important in picking sites than tax breaks. James C. Harper says his outlet in New Jersey's Camden enterprise zone is the most successful of his four Rally's Inc. hamburger franchises. And while noting the tax advantages, he says, "We probably would have gone in anyway."

There are some basic drawbacks to enterprise zones. Some businesses move into the zones from outside—a zero-sum

BUSH'S PLAN FOR ENTERPRISE ZONES

MORE MONEY Spend \$1.9 billion over five years to create 50 new enterprise zones, including 15 in rural areas

TAX CREDITS Zone employees earning less than \$20,000 would get 5% credit for first \$10,500 of wages

TAX BREAKS No capital-gains tax on sale of property held more than two years

TAX DEDUCTIONS Investors could deduct up to \$50,000 a year, up to \$250,000 in a lifetime, for the purchase of stock held in small enterprise-zone companies

DATA BW

game that creates jobs in one area at the expense of another. And the goal of employing residents often isn't met, largely because companies can't find the skilled workers they need in the community.

In the Benton Harbor (Mich.) enterprise zone, for instance, the 101 companies that get tax breaks are encouraged to hire residents from the community, which has a 28% jobless rate. But David J. Yardley, an executive at TRIAX Inc., a custom metal fabricator, says no more than 40% of the 40 jobs at his company go to city residents. Few locals have the required skills for the engineering and support-staff jobs, he says. "It's not the residents' fault," he says. "They're just entrapped in a cycle of poverty."

HALF THE TAX. New Jersey's enterprise-zone program is considered one of the best—and, at nine years, one of the oldest. Nearly 2,500 companies have moved into 10 New Jersey zones, where they're exempt from paying sales tax on personal property and on the cost of materials to renovate buildings.

They get another big tax break, too. Zone retailers charge just half of the 7% sales tax normally collected. The rest is paid into a fund for improvements to the local infrastructure. In Trenton, Apex Lumber Mart has a sign in its window advertising the low sales tax. Owner Mark Goitein says that real estate agents call all the time to offer suburban properties, but that the tax breaks keep him downtown. He says many of his customers come from the suburbs, anyway. "If they didn't have an incentive to come into the zone, most people would tend to stay away," he says.

The program isn't a big drain on state coffers, but results have been hard to quantify. A study by Marilyn Rubin, an associate professor at John Jay College of Criminal Justice in New York, found that New Jersey's enterprise zones generated nearly \$2 in revenues to the state for every \$1 it spent. But just one-third of zone businesses say tax breaks were a big factor in their decision to locate in the inner city. Meanwhile, job growth was larger in the zones than in communities outside them, but Rubin couldn't trace that directly to the program.

Even their most ardent boosters concede that enterprise zones alone won't work. Representative Charles B. Rangel (D-N. Y.), an early proponent of such incentives, says he won't support any proposal that isn't part of a larger package, with funds for job training, housing, and other programs. "The enterprise zone is only one tool to be used in the revitalization of economically depressed communities," he says. Then again, Washington has to start somewhere.

By Susan B. Garland, with Christina Del Valle in Washington, David Greisinger in Chicago, and Janet Bamford in Trenton

CHRYSLER YELLS 'LOOK AT ME' TO AN UPSCALE AUDIENCE

Will the stylish LH line help shake its cars' blue-collar image?

It has been a long, uphill grind. But next month, Chrysler Corp.'s new, make-or-break LH line of family sedans will start rolling off a Bramalea (Ont.) assembly line. The cars are already getting rave reviews for their comfort, ride, and handling. Even Charles M. Jordan, chief designer at General Motors Corp. and hardly a Chrysler booster, ranks the new models' designs as among the best in the world.

The big question now: Will anybody buy the darn things, no matter how good they are? The new cars, which will sell under the Dodge Intrepid, Eagle Vision, and Chrysler Concorde names, are targeted at the brutally competitive midsize family-sedan market. Their rivals include the three top-selling U.S. cars so far this year: Honda's Accord, Ford's restyled Taurus, and Toyota's new Camry. Chrysler, with its reputation for stodgy styling and poor quality, faces a tough sell.

Chrysler executives don't minimize the challenge. "We realize there are a lot of shopping lists we aren't on," concedes Steven Torok, general manager of the Chrysler-Plymouth Div. But the company figures if it can just persuade skeptical shoppers to try the cars, they'll start selling. So it has come up with an imaginative marketing campaign to lure buyers more demanding than its traditionally older, largely blue-collar clientele. Eventually, Chrysler hopes 50% of the cars will be bought by owners of Japanese imports.

CAREFUL AIM. Chrysler has been on a long slide in the car market. Young shoppers fled to other brands as its line-up aged. Its market share since 1988 has plunged by 3.3 points, to 7.9%—behind Honda and Toyota. During last year's slump, it was mainly Jeeps and minivans that kept the company afloat.

With such a bad rep to overcome,

Chrysler has aimed each of its models carefully at a particular audience. Starting at \$16,000, the Intrepid is a basic family sedan with less standard equipment than the others. The Vision, at a base of \$17,000, is sportier, with a better-handling suspension. Both cost more than an Accord, which starts at \$14,250 but has only a four-cylinder engine. Given their spaciousness, however, the new cars compete well with a comparable Taurus or Camry, which start at \$15,000 and \$17,300, respectively.

Chrysler hasn't neglected the top of

ads. By contrast, more of Concorde budget will go into cable TV—which reaches more high-end buyers.

Meanwhile, Chrysler hopes to foster favorable word of mouth among potential buyers. In mid-October, the company will offer to lend new cars for a few days to up to 10,000 engineers, accountants, and other professionals whose opinions, Chrysler believes, carry weight with car shoppers.

LOCAL SNOOPS. Chrysler will also try to spiff up its dealers' seedy image. Beginning this summer, it will spend \$35 million teaching new soft-sell sales tactics and pampering ways to 115,000 employees of the company's 5,000 dealerships. Chrysler's corporate staff will monitor dealer performance through surveys and visits by undercover "shoppers."

On top of all that, there will be no twists on old strategies, such as direct mail. For instance, Chrysler will send test-drive invitations—and, in some

THE LH SALES STRATEGY

- ▶ Pour \$35 million into teaching 115,000 employees better selling and people skills
- ▶ Pay bonuses of up to \$500 a car to dealers with high customer-satisfaction ratings
- ▶ Generate positive word-of-mouth by getting up to 10,000 opinion leaders to try out the cars for several days
- ▶ Display cars in museums, concert halls, and hotel lobbies, where upscale prospective buyers will see them
- ▶ Mail test-drive invitations to 4 million to 5 million prospects, in some cases with a promotional video
- ▶ Get more from ads by doing less on network TV and more on cable and such unconventional media as on-line computer services

DATA CHRYSLER CORP.



the line, either. The Concorde, which starts at about \$18,000, has a more luxurious interior and such nifty features as standard antilock brakes. It aims to be a less expensive alternative to low-end luxury cars such as Toyota Motor Co.'s Lexus ES 300, which goes for \$27,500. Next year, a longer and even more luxurious New Yorker based on the LH design is due.

As for advertising, Chrysler is waiting until August—just before the new models hit the showrooms in large numbers—to announce whether Chairman Lee A. Iacocca will again be featured. But marketers are already tailoring the ad mix to each audience. For instance, they figure potential Vision customers, like import car buyers, read more than average consumers—so more than 35% of the Vision's budget will go for print

cases, promotional videos—to impress owners and to the 2 million owners of minivans, who fit the new sedans' demographic profile. That's shrewd: Many baby boomers have a second car, and their kids grow up, they often trade minivans for traditional wheels.

Chrysler's timing looks good. The U.S. car market is finally picking up, and some Japanese rivals are under financial pressure. The company is also striving to ensure that the new cars' quality is top-notch. For instance, it started working bugs out of prototypes 95 weeks before production was scheduled to begin, vs. the usual 65 weeks. Given the traffic jam of tough rivals in the market, Chrysler knows it must get everything right. And even then, success in cars is far from a cinch.

By David Woodruff in Detroit



WORRIED: SMALL-BANK REPRESENTATIVE GUENTHER

rest easier if they knew limits were placed on banks' sales of life, property, and annuity policies. For example, the compromise would restrict banks from setting up insurance units in Delaware, the only state that lets out-of-state banks come in and form nationwide insurance subsidiaries.

When word of the deal first leaked out, other bankers cried foul. The Independent Bankers Assn. of America (IBAA), which represents smaller banks, worried about

competition from big regionals. It accused NationsBank Chairman Hugh L. McColl Jr. of selling out. Many bankers have long sought approval to expand their menu of consumer products by selling insurance.

The opposition has mellowed since the Treasury began courting IBAA Executive Vice-President Kenneth A. Guenther. But Guenther is still driving a hard bargain. At a May 11 meeting, he made it plain that small-town bankers would rather be bought out than face big-bank competition. They want any deal to require that regionals buy existing institutions in towns of 50,000 or fewer people rather than just open branches.

Neither the Treasury nor the American Bankers Assn. has agreed to IBAA's demands. "We're searching for that elusive piece of turf that the whole industry can stand on," says Assistant Treasury Secretary Jerome H. Powell.

Citicorp—which sells insurance through a Delaware subsidiary—is likely to challenge the Gang of Six regionals. And state banking supervisors are furious that the proposed deal would preempt states' insurance laws.

Even if banks find common ground, their plan must clear Congress. House Banking Committee Chairman Henry B. Gonzalez (D-Tex.) is skeptical of interstate branching. What's more, the would-be bargainers are up against the clock: With 16 weeks left in the session, Congress has held no hearings on the as-yet-undrafted bill.

But while the calendar is running out this year, banks may have even less chance if they wait for 1993. "Next year," a top lobbyist says, "we're going to have 100-plus new members in the House, potentially a new Administration, maybe a new House leadership. If banks want to get interstate, that argues that the time is now." The next few weeks will test how much banks will swallow to win that right.

By Mike McNamee in Washington

A BIG DEAL FOR BIG BANKS

Their pact with insurers may pave the way for interstate branches

Of all the benefits bankers hoped to gain from last year's unsuccessful bank-reform bill, interstate branching was the most precious. And of all the obstacles the banks encountered in their failure, the most formidable were insurance agents—a grass-roots group that opposed reform because it would have granted banks broad powers to sell insurance.

Now, however, both sides may be nearing a compromise that ultimately could allow banks to branch across state lines. Six major regional banks, led by Charlotte (N. C.)-based NationsBank Corp., have struck a deal with the powerful Independent Insurance Agents of America. The agents will accept interstate branching if the banks agree to limits on insurance sales. The Treasury Dept., badly embarrassed by its failure to expand banks' powers last year, is quietly trying to bring other banks and trade groups into the bargain.

LOCAL CONTROL. Banks and insurance agents both stand to gain from the deal. Big regionals, such as BankAmerica Corp. of San Francisco, Providence-based Fleet/Norstar Financial Group, and First Interstate Bancorp in Los Angeles, believe they can sharply reduce costs with interstate branching. Although banks can own institutions in other states, they often must maintain local managements and boards. Eliminating such expenses would help offset rising regulatory costs, including a 22% hike in premiums voted on May 12 by the Federal Deposit Insurance Corp.

For their part, insurance agents could

A NEW EAGLE GETS THE EAGLE EYE

You know right off that this ain't Dad's old Chrysler land yacht. Gone are the boxy styling and rococo chrome, the clunky controls and tufted seat covers. And a half-hour of putting Chrysler's new Eagle Vision through its paces convinced me that its road manners are very classy indeed.

From the outside, the Vision and its sisters, the Chrysler Concorde and Dodge Intrepid, resemble the rest of today's ovoid four-doors: the same low snouts, swooping roof lines, and high, rounded rear ends. But inside, it's another world. Thanks to a "cab forward" design, which places the wheels as close to the bumpers as possible, these cars have seats of room. The

front bucket seats, inspired by Mercedes-Benz, adjust in every direction. With the driver's seat clear back, there's leg room to spare—even for my 6-foot, 2-inch frame. Rear knee room rivals luxury cars'.

KIDDIE SEAT. With all that space, I still don't rattle around behind the wheel. Controls angle toward the driver, creating a cockpit-like feel—but I have to stretch down below the radio to reach the climate controls. Knobs, switches, and the pop-out cup-holder move smoothly.

The Vision's suspension is firm but supple enough for a quiet ride over potholes. I feel confident whizzing around corners at high speed. But the 155-horsepower V-6 may not satisfy the lead-footed. They may opt for a 215-horse engine.

The front-wheel-drive Vision boasts all the latest safety gadgets, too: Driver and front-passenger air bags are standard, and some versions have anti-lock brakes. There's even optional traction control, to keep the wheels from spinning on slick roads. Another nice touch: an optional built-in, fold-away child's seat in back.

The tentative verdict: Chrysler's got a winner. But it'll be months before we know if the Vision's quality matches all of its tough rivals already making their way from factory to showroom.

By David Woodruff in Detroit



TENGHIZ OIL FIELD: RESERVES ARE 2.5 TIMES LARGER THAN THOSE OF ALASKA'S PRUDHOE BAY

TODAY KAZAKHSTAN, TOMORROW RUSSIA?

Big Oil is itching to make deals—and Chevron proves it can be done

Almost five years ago, Chevron Corp. executives scoured the Soviet Union for a major oil project. Finally, they settled on Tenghiz, a huge field in an arid corner of Kazakhstan. Reserves there may be 2.5 times larger than Alaska's Prudhoe Bay. But history turned the deal on its head last August, when the botched coup firmly put the country on the road to disintegration. Suddenly, instead of the smooth Moscow bureaucrats it had become accustomed to, Chevron found itself dealing with newly independent Kazakhs, who took a tough new negotiating stand. By March, the project seemed doomed.

But chalk one up for persistence. On May 18, top Chevron officials and Kazakh President Nursultan Nazarbayev are set to sign an agreement in Washington to create a 50-50 joint venture to develop Tenghiz and sister oil field Korolev. A final agreement is due by yearend.

For Chevron, the deal guarantees a vital new source of crude: Tenghiz holds total reserves of up to 25 billion barrels, with as much as 10 billion barrels recoverable. For Kazakhstan, the agreement means \$1.5 billion in investment over the next three

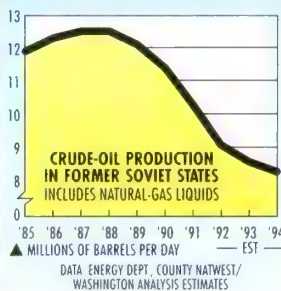
years and much more later. When Tenghiz production is in full swing 15 years from now, it could be generating annual revenues of \$6 billion at today's oil prices. Kazakhstan's take will be \$4 billion, most of which will be plowed into industries ranging from food processing to metallurgy to petrochemicals, says Deputy Prime Minister Kalyk A. Abdullayev, Kazakhstan's chief Tenghiz negotiator. For the rest of the world, the Tenghiz field could put enough new crude on the market to temper OPEC price hikes for many years.

STALLED DEALS. The closely watched Chevron deal comes just as political and economic turmoil is stalling Western investment in the former Soviet Union. At least a dozen major oil companies, for example, are trying to put together simi-



NEGOTIATOR ABDULLAYEV

PLUNGING OUTPUT



lar deals in Russia, Azerbaijan, and different parts of Kazakhstan. But in Russia, at least, the talks have been hampered by stiff oil-export taxes and political chaos.

Take White Nights, a small Siberian oil venture owned partly by Houston-based Anglo-Suisse and Phibro Energy Inc. The 18-month-old deal could founder if Russian lawmakers don't rescind a \$5.50-per-barrel levy approved early this year. And Marathon Oil Ltd. and McDermott International Inc. are part of a consortium that had hoped to drill off the island of Sakhalin, in Russia's Far East. But local authorities have slowed down the plan.

The chaos surrounding Russia's fledgling democracy works in Kazakhstan's favor. In Kazakhstan, "there's a very clear authority, a very popular President. They are open for business, and they are serious now," says James L. Smith, a University of Houston economist. The deal with Chevron also sends Russia an important message: "If the Russians don't get their act together, Western companies will start heading to other areas," says Jan Vanous, president of PlanEcon Inc., a Washington consulting firm. Indeed, Nazarbayev is expected to push hard for more U.S. investment during his May 16-23 visit to the White House and New York.

EXCLUSIVE RIGHTS. Still, dealing with the Kazakhs was no easy task for Chevron, which started talking about oil deals with former President Mikhail Gorbachev's government in the summer of 1987. By 1990, working mostly with Gorbachev's people, Chevron had settled on Tenghiz and won exclusive exploration rights. The deal got off track in 1991 when a state commission ripped apart the Tenghiz deal as too favorable to Chevron. It was turned completely upside down last Aug. 31, when Kazakhstan nationalized its resources. By yearend, the Soviet Union and the trade consortium were out of business.

Eventually, Kazakhstan and Chevron got talking again. The inexperienced Kazakhs hired J. P. Morgan, Oman Oil, and Slaughter & May, a London law firm, to help them negotiate with the oil giant. Nazarbayev wanted to prove to Chevron—and the world—that he was no pushover before major Western enterprises. "The weak spot in previous negotiations was that officials of the former Soviet Union didn't get qualified legal people to run the talks," says Abdullayev.

To prove his mettle, President Nazarbayev scotched Chevron's hopes of winning



We design
fax machines for
this kind of office, too.

Introducing the Home Fax.

We've been in business offices with our thermal and plain paper fax machines for years. Now we're happy to announce you'll be seeing us here, too. At that office you work in after you leave work. Welcome home.

For more information on the Home Fax, call 1-800-543-4636.

muratecTM
a product of **murata technology**

Top of the News

rights to 50% of the oil revenues from the Tenghiz and Korolev fields. He demanded that Kazakhstan be guaranteed an 87% share of oil revenues after operating and investment costs, but later settled on 80%. The Kazakhs and Chevron will each hold a 50% equity stake in the deal. And Chevron isn't expected to recoup its initial investment for at least seven years. What's more, says Abdul-

layev, Chevron will be required to make investments and supply technology for the tiny Kazakh petrochemical industry.

Some key issues remain unresolved. One is the logistics of exporting oil. The easiest way is via pipeline to a Black Sea port, but pipeline connections need to be built through Russia, Azerbaijan, or Georgia. All are undergoing some political upheaval.

With oil production in the former Soviet Union in decline (chart, page 32), Russia, Kazakhstan, and Azerbaijan need all the investment they can get. But, as Chevron found, haggling with the newly independent states will require lots of money, fortitude—and persistence.

By Rose Brady in Moscow, with Deborah Fowler in Houston, Robert Buder in Boston, and Peter Galuszka in New York

TOURISM



ROYAL CARIBBEAN'S NEWEST, BIGGEST SHIP, THE MAJESTY OF THE SEAS, IS CHRISTENED IN MIAMI

ROYAL CARIBBEAN MAY BE TAKING ON WATER

The cruise line says not to worry, but its debt load is staggering

Cheers rang out and fireworks popped as Queen Sonja of Norway smashed a huge bottle of champagne against the hull of Royal Caribbean Cruises Ltd.'s newest and biggest ship, the 2,300-passenger Majesty of the Seas. The recent christening of RCC's third megaship to ply the Caribbean went off without a hitch.

Little else has gone so well lately for the Miami-based cruise line. First, in December, 1990, a shipyard fire damaged the Monarch, a Royal Caribbean ship under construction. Then, Royal Caribbean made a mere \$4.3 million on revenues of \$760 million in 1991, according to financial statements it filed in preparation for a sale of \$125 million in bonds. Once they're sold, long-term debt of \$1.1 billion will make up 73% of total capitalization. Debt service is eating away at the bottom line. Added competition will nib-

ble more: The Majesty of the Seas is steaming straight into a projected 11.5% increase in cruise-ship capacity in 1992. Including the Majesty, 12 new ships and 11,000 new berths are scheduled to enter service this year.

Royal Caribbean's owners say they're not worried. Co-founder Arne Wilhelmsen points out that in a year marred by the recession, the gulf war, and the aftermath of the Monarch fire, RCC still posted a profit. But with 50% of the company held in a partnership controlled by Chicago's Pritzker family, Wilhelmsen has other investors to consider. Jay A. Pritzker, the family's dealmaker, says he hasn't lost patience. "I would have liked it to have been better, of course," he says. "It's not a slam dunk, but they're doing well."

RCC's rivals aren't as generous. "We were surprised" by the weak results,

says Carnival Cruise Lines Inc. Chairman Micky Arison. His company did far better, earning \$85 million on \$1.4 billion in revenues in 1991. Says analyst Michael Mueller of Montgomery Securities: "Carnival is the low-cost producer and in this recession has done significantly better than its competitors."

MASS APPEAL. Carnival's marketing may be the key difference. Its "Fun Ships" carry the masses, while its Holland America Line Inc. handles the upscale crowd. RCC seems to want the best of both worlds—its single brand targets the upper end of the volume market. But as Robert H. Dickinson, Carnival's senior vice-president for marketing, notes, Royal Caribbean keeps its ships full only through mass-market pricing. As Dickinson puts it: "Palm Springs is looking more like Las Vegas, but they're still sending the Palm Springs message."

RCC Chairman Richard D. Fain defends his strategy. "I see absolutely no contradiction in appealing to the volume market and yet saying we are providing a quality product at a low price," he says. But Pritzker concedes that RCC faces the same conundrum as another of the family's big holdings, Hyatt Hotels Corp.: convincing consumers that a slightly higher price buys a big jump in quality.

That might be an easier message to send this year. James Parker, an analyst at Robinson-Humphrey Co. in Atlanta, expects that increased vacation spending in 1992 will keep the new boats full, though price competition will keep a lid on industry yields. Profits still may get a lift, because passenger volume should increase more than overhead.

RCC sorely needs a good year. Its interest expense added up to \$59 million in 1991, and the nut is even bigger this year: More than \$134 million in principal and interest payments come due. Debt coverage "looks a little skinny," analyst Peter R. McMullin of Southeast Research Partners observes.

That's why RCC is mulling a public stock offering this year. "The purpose would be to reduce leverage, not for any of us to bail out," says Pritzker. Still, the Pritzkers, whose name is synonymous with smart money, don't plan to take more of the action for themselves.

By Gail DeGeorge in Miami

The Buick Regal Gran Sport. A car as rewarding on pavement as it is on paper.

	Buick Regal Gran Sport	Lexus ES 300
Engine	3.8-litre V6	3.0-litre V6
Transmission	4-speed automatic (std)	4-speed automatic (std)
Touring Suspension	4-wheel independent	4-wheel independent
Brakes	Anti-lock disc	Anti-lock disc
Wheels	16" aluminum alloy	15" aluminum alloy
EPA Est. MPG	18 city/28 hwy	17 city/23 hwy
M.S.R.P.*	\$21,240	\$26,150

*Manufacturer's suggested retail price including dealer prep. Destination charge, tax, license and options additional. Levels of equipment vary.
©1992 GM Corp. All rights reserved. Regal is a registered trademark of GM Corp. Buckle up, America! 



To see the engineering advantages of a Regal Gran Sport, take it for a test drive. To see its financial advantage, just compare Regal to the competition.



Obviously, when it comes to giving you value, Regal Gran Sport is a very good sport. For more information on Regal, please call 1-800-423-6787.

BUICK

The New Symbol For Quality
In America.

CALIFORNIA IS READY TO TOSS EGGS AT BUSH AND CLINTON

The riots have heightened voter discontent with both candidates

Longtime to Jerry Brown to give it a name. Struggling to describe a political process run amok, the former California governor dubbed the electoral system "a political gong show." And as the long Presidential nominating season lurches to a fitful conclusion, nowhere is the gong of public discontent tolling more loudly than in California.

On June 2, California's Presidential

uplands from which they can launch their conventions. This year, there are thunderclouds." The darkest: The Los Angeles riots, which exposed elected officials' impotence in the face of urban unrest.

And the economy offers no respite. While the rest of the nation inches toward recovery, California is still mired in recession. Unemployment stands at 8%.



primary rings down the curtain on the nominating season. Other states, among them Ohio and New Jersey, hold contests that day. But with 348 Democratic delegates and 201 Republican, California

CURDLED KARMA. Since George Bush and Arkansas Governor Bill Clinton are their parties' all-but-certain nominees, the Golden State ought to provide a triumphant finale: It's an opportunity for a little leisurely campaigning, some field-testing of general-election themes, and a final round of glitzy fund-raising.

But in 1992, the karma has curdled. Says Paul Maslin, a Los Angeles-based Democratic pollster: "Bush and Clinton are showing fundamental weakness in a crucial state." Alan Heslop, professor of government at Claremont McKenna College, agrees: "Historically, candidates have regarded California as the sunny

And despite \$7 billion in tax hikes, a fresh \$2 billion revenue shortfall has set off a new budget crisis.

Those megawoes, plus sniping from a fading Pat Buchanan, won't make President Bush's California task easy. But Clinton has his own headaches. His unfavorable rating is a lethal 54%. He runs third in polls of November election sentiment, behind Bush and the soaring quasi candidacy of independent H. Ross Perot. To make matters worse, Clinton still must contend with native son Brown, who has taken to campaigning alongside members of L.A. street gangs and is poised for one last, gonzo charge.

A California stumble wouldn't deny Clinton the nomination. But it would renew unease about his electability. "Clinton has a hell of a lot of work to do,"

says Democratic consultant Bill Carrick. A new California survey by pollster Mervin D. Field found that Clinton has the support of only 30% of registered Democrats, with Brown garnering 28% and former Senator Paul Tsongas scoring a nostalgic 23%. The shocker is Perot: Were he on the ballot, the poll shows he'd get 37% of the total Golden State vote, to Bush's 31% and Clinton's 25%.

Bush and Clinton are struggling to cope with the storm of discontent. After a visit to the L.A. riot corridor, the President promised \$19 million in federal rebuilding funds and signaled a new willingness to work with Congress on \$300 million more in emergency aid. Few Californians seemed impressed. "The riots have everybody screaming, 'What can you do for me?' at Bush," says Field.

TOUGH LINE. From here on, Bush will shun the riot zone. Instead, he'll concentrate on shoring up his base with California conservatives, who are furious with him for raising taxes, and with Reagan Democrats, who have been clobbered by the recession. Bush will head back into the state in late May, where he'll preview his fall attack on Clinton.

His keynote: a tough law-and-order stance and praise for the L.A. police. "Bush needs to put the Republican coalition back together," says GOP strategist Edward J. Rollins. "One way he does that is by stressing the thin blue line that stands between Californians and terrorism." But, cautions Marty Wilson, Bush's state campaign manager, "California's problems are boosting voter pessimism, and there's a question of how much that rubs off on Bush."

California poses a different problem for Clinton. Although he's been quick to tour L.A.'s riot-charred precincts, the Arkansan has been targeting blue-collar Democrats. In a recent visit, he toured El Cajon, a working-class suburb of San Diego, and told a sparse crowd at an outdoor rally that "we're losing ground economically." The solution: "a national economic game plan."

So far, Clinton is mostly being greeted with curiosity by folks in El Cajon and other blue-collar enclaves. Bill Watts, a 54-year-old San Diego retiree who listened impassively to Clinton's spiel, says: "It would take eight years to do half of what he's promising." Watts's conclusion: "He's a conventional

politician, like Bush. They're both floundering, trying to figure out what to do." Right. And doing their best to take note of the high-pitched sound of voter rage: California screaming.

By Lee Walczak in El Cajon, with Ronald Grover in Los Angeles





This is a moment for a Macanudo.

A golfer's moment to remember has a way of etching itself in the mind for a lifetime. And whether your handicap is 5 or 35, there is always one unlikely putt, or one improbable approach or one unforgettable drive that stands above all the rest.

Such moments to remember are made for a Macanudo cigar. For in an age when speed is all too often the order of the day, the men of Macanudo still take more than two years to turn the finest tobaccos in the world into cigars made entirely by hand.

Just so you can let any moment worth savoring linger on and on with all the taste and aroma of the ultimate cigar.



In Business This Week

EDITED BY HARRIS COLLINGWOOD

WHAT THE WELL-TO-DO WOULD DO

The rich, said Fitzgerald, are different from you and me. And they have decided views on economic policy, as Fleet Investment Services learned in an April poll. Here's some of what over 1,000 business professionals with annual personal incomes of \$100,000 or more said about what ails the economy—and how to fix it:

Percent who think the federal budget deficit hurts the economy **74%**

Percent who think unproductive U.S. workers hurt the economy **18%**

Percent who favor cutting the tax on capital gains **45%**

Percent who oppose increased import quotas **67%**

Percent who think financial advisers are not a very important source of economic information **50%**

DATA: FLEET INVESTMENT SERVICES

APPLE GETS A BREAK FROM THE JUDGE

► Apple Computer has won a stay. On May 12, U.S. District Judge Vaughn Walker "reluctantly" agreed to reconsider his prior ruling that gutted Apple's copyright suit against Microsoft. Walker's reasoning: Apple filed volumes of new information that can't be ignored in so important a case. A June 9 hearing is scheduled.

On Apr. 14, Walker had tossed out most of Apple's claims that Microsoft Windows illegally copies the "look and feel" of its Macintosh software. The case, which has dragged on for four years, is seen as crucial to the computer industry, which is grappling with how and when to protect intellectual property.

MICKEY ISN'T EXACTLY THE TOAST OF PAREE

► It's the question du jour in Paris: How is Euro Disneyland doing a month after opening? *Pas mal*, concluded

a French TV team, after interviewing train and bus crews and scanning cars entering the park 20 miles east of Paris. *Au contraire*, argued a Paris newspaper, based on similar seat-of-the-pants survey methods.

Stock traders heeded *Libération* rather than Disney, which won't give numbers but claims attendance is strong. Euro Disney shares fell 4.4% on May 12. The newspaper indicated the next day that its crowd estimate was far too low, but the stock inched back only slightly. Outsiders agree on one thing: Most visitors are non-French, instead of the 50-50 split Disney expected. That may be why Disney is peppering Paris with TV and newspaper ads, despite massive free publicity surrounding the park's opening.

THE SEC TAKES A LOOK AT KEMPER'S BOOKS

► For more than a year, analysts and investors have blasted Kemper for its plodding pace in writing down its real estate portfolio. Now, the insurer's way of accounting for property values has attracted attention from the Securities & Exchange Commission.

At Kemper's May 13 annual meeting, Chairman David Mathis disclosed that the SEC has begun "an informal inquiry" into Kemper's accounting and disclosure practices for its

AND THE GREASY COVERALLS PRIZE GOES TO...

The cars may run on methanol, but the Indianapolis 500 really runs on money—lots of it. The Indianapolis Motor Speedway and race sponsors handed out more than \$7 million in prize money last year, including awards for the oldest driver, the youngest driver, and the driver who takes the most practice laps. And this year, for the first time, the car with the slowest qualifying time will capture the Slo Poke award.

The Slo Poke, some of you may recall, is a long-lasting caramel lollipop. To gain publicity for the candy, its maker, D. L. Clark Co., is funding the \$5,000 prize. The winning (sic) car will whiz around the track sporting a Slo Poke decal.

You might think that any self-respecting driver would reject such a dubious honor. But auto racing is an expensive hobby, notes Indy 500 marketing exec Kurt Hunt. In a cash-hungry world, he says, "no one is reluctant to accept \$5,000."



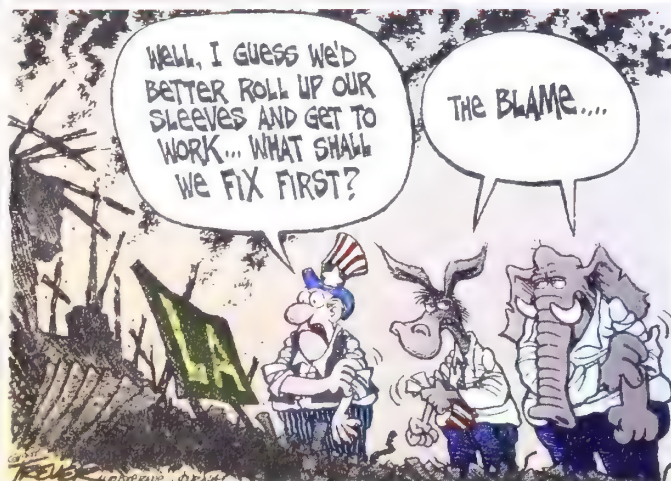
real estate portfolio from 1989 to the present. He added that other companies are under similar scrutiny but wouldn't identify them.

WHAT'S 'WILDCATting' IN MANDARIN?

► Amoco signed a deal on May 13 that will make it the first major Western company to drill for oil in mainland China. Amoco will explore 1.27 million acres located about 400 miles northwest of Shanghai. The size of any possible find is unknowable, but Amoco says the area holds "significant potential."

ANOTHER REPRIEVE FOR UPI

► United Press International has found an unlikely new owner. Televangelist and cable-TV entrepreneur Pat Robertson bought the bankrupt news agency for \$6 million at a Federal Bankruptcy Court hearing on Apr. 12. Robertson's successful bid includes an immediate cash infusion of at least \$300,000 to keep the news agency operating. UPI, a unit of Infotechnology, says it would have been forced to shut down by May 15 unless it found a buyer.



THE GERMANY-U.S. SKY WAR HEATS UP

► Will Germany follow France and renounce its bilateral air treaty with the U.S.? Several months of discussions haven't resolved German concerns over the high number of seats and low fares that U.S. airlines offer for trips to Germany. A U.S. official says Germany will state its policy by May 18. At the least, say U.S. officials, the Germans are trying to exert pressure before the next round of talks begins on June 9 in Bonn.



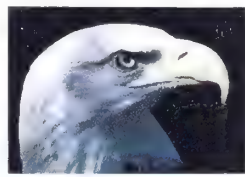
"Memorial Day weekend, 1991. I was home, relaxing, having a good time. Little did I know that back at the office trouble was brewing!" Last year, lightning struck the air conditioning at Guinness

America, Inc. headquarters. And even though nobody was around, when hot and the phone lines shut down, an AT&T Mega Watch™ technician spotted immediately AT&T Mega Watch is an exclusive AT&T MEGACOM® WATS service.



the building got too the problem Our technicians can, and coordinate

monitor your phone equipment and T15 circuits, spotting trouble before you repairs. The service may impact your



gives you one contact for any network *and* equipment problems that AT&T MEGACOM WATS service.

Thanks to Tuesday morning,

AT&T Mega Watch, a repair technician was at Guinness headquarters early and they were back in business by 10:30 A.M.

AT&T Mega Watch is one of many striking ways that AT&T MEGACOM WATS can give an edge to businesses that use at least \$3,000 per month in outbound long distance.

And all the technology, service and innovation are in addition to the deep discounts of AT&T's biggest WATS savings plan.

Sign up for AT&T MEGACOM WATS by October 15 and we'll waive installation and start-up charges.

If you sign up by October 15, 1992, you can save considerably on installation and start-up charges, which average \$2,100* Call your AT&T Account Executive at 1 800 247-1212, Dept. RY7.

*What's more, if you sign up by October 15, 1992, we'll waive the installation and start-up charges, which average \$2,100**

So call your AT&T Account Executive today. The more your business depends on outbound long distance, the more your business needs AT&T MEGACOM WATS.

*Installation must be accepted by November 2, 1992. Customer must maintain service for six consecutive months with a minimum average usage of \$1,875 per new Account Number. Other restrictions may apply.



Software Rider.



Let The Good Times Roll.

It's more than a slogan to the folks at Kawasaki. It's a philosophy. And you can see it in everything they make from their exciting, world-renowned motorcycles to their industry-leading Jet Ski® personal watercraft.

What you don't see are the computer systems behind the company that keeps the good times rolling.

"CA systems software helps keep our company running smoothly 24 hours a day, 7 days a week," says Bob Shepard, EVP of Information Systems. "It's helped us automate our operations and cut IS costs significantly while productivity continues to rise year after year."



To achieve these goals, Kawasaki deploys a broad range of systems software from CA including one of the most comprehensive and effective security software programs ever developed, CA-TOP SECRET.®

"I don't have time to deal with 30 different software companies that each offer only one or two

EXECUTIVE VICE PRESIDENT OF
KAWASAKI, BOB SHEPARD,
USES ADVANCED CA SYSTEMS
SOFTWARE TO AUTOMATE
OPERATIONS, SLASH IS COSTS
AND BOOST PRODUCTIVITY.

pieces of the puzzle. As much as possible, we use CA. Their service and support is rock-solid, their software is great and it's all

backed by a billion dollar company. That's what I like."

And the result is an efficient, smooth-running IS operation?

"Absolutely. Smooth as a Kawasaki Ninja® motorcycle carving up an S curve."

COMPUTER ASSOCIATES
Software superior by design.

© Computer Associates International, Inc., One Computer Associates Plaza, Islandia, NY 11788-7000. 1-800-CALL CAI. All product names referenced herein are trademarks of their respective companies.

THE FIRE IN LOS ANGELES LIGHTS UP THE WHITE HOUSE

The Los Angeles riots are proving to be a long-needed alarm bell at George Bush's somnolent White House. Like the mumbling of a newly aroused sleeper, the initial response has been less than fully coherent. But some aides see signs that the staff operation, adrift for months, may finally be coming to life.

A series of post-L.A. polls—including those taken by the Bush campaign—finally seem to have broken through the slush surrounding Chief of Staff Samuel K. Skinner. Rather than give the expected boost to a law-and-order chief executive, the riots appear to have crystallized other concerns about Bush's haplessness. It's scary," says one senior adviser. There's a broadly held sense among whites and blacks that George Bush will never do anything as President to improve their lives."

O GUSHER. The bad numbers set off what the senior Administration official calls "a subterranean impulse to do something certain for a change." Skinner responded first by tightening up the White House domestic-policy operation. He has cast aside the organizational blueprint drawn up by R. Nabisco Inc. executive Eugene R. Croissant and trimmed the roles of deputy staff chief W. Henson Moore and domestic-issues czar Clayton Yeutter. Instead, Skinner is turning directly to Budget Director Richard G. Darman and William Kristol, the Vice-President's chief of staff, for policy advice.

The new interest in domestic affairs isn't likely to produce a rush of election-year policy proposals. It's getting late in the congressional session, and, aside from an emergency L.A. aid bill and a bipartisan agreement to authorize creation of urban enterprise zones (page 29), the legislative pipeline is pretty much empty. Bush hasn't even made an effort to revive the economic-recovery tax cut that he vetoed in March after Congress tacked on a tax increase for the rich.

Instead, the President is likely to inject a new tone of domestic urgency into his campaign, promoting the sort of "conservative war on poverty" long urged on him by Housing & Urban Development Secretary Jack F. Kemp and other activist aides. Kemp made his move when he accompanied Bush to Los Angeles. Aboard Air Force One, he insisted on rewriting a Bush speech to make it more upbeat. Kemp has to be careful not to overplay his hand. One senior White House aide, suspecting that the HUD chief is promoting himself a bit too much, warns: "There will be retaliation if he's not careful."

Still, Kemp is enjoying the limelight after three years in the shadows. Beams one Kempite: "In one of life's blessed ironies, they are clinging to him like a life raft."

Darman, too, is enjoying a resurgence of influence after months in Skinner's doghouse. His encyclopedic knowledge of federal programs, and his cleverness at dealing with the intricacies of financing initiatives, make him indispensable. Conservatives remain distrustful of the budget director. Kemp can't forgive him for dropping urban enterprise zones from a January economic-recovery package to make room for repeal of the luxury tax on yachts. And others, who blame Darman for the tax increases in the 1990 budget

deal, will be keeping a close eye on him. Says a senior Bush campaign official: "Everybody is wise to his tricks now."

Such backbiting among top aides as the campaign is about to begin in earnest could be trouble. But there are hopeful signs. Skinner has corrected some early organizational mistakes. And the Bush team is finally beginning to focus on the domestic issues that voters say they care about, but which the President has studiously avoided. The process is ugly—but if it ends the policy paralysis at the White House, it could make Bush's road to reelection easier.

By Douglas A. Harbrecht



SKINNER: BYE-BYE BUREAUCRACY?

CAPITAL WRAPUP

CONGRESS

How worried is embattled House Speaker Thomas S. Foley about hanging on to his job in the new Congress? Enough so that the Washington Democrat is looking for some reelection help. He has asked Representative Jim Gejdenson (D-Conn.), a six-term member with close ties to both the leadership and disaffected younger members, to organize some small dinners with Democrats. A Foley spokesman says Gejdenson is not a formal campaign manager—which no candidate for Speaker in modern times has had—but many on the Hill see him in that role. Although as yet Foley has no announced opposi-

tion, he could face a challenge when the newly elected House holds organizational meetings in December. The Speaker has received bitter criticism for his handling of the House Bank scandal and for failing to be sufficiently partisan in confronting President Bush and House Republicans.

DISTURBANCES

President Bush should not have been completely surprised by the outbreak of racial violence in Los Angeles. At a White House meeting in January, Mayor Tom Bradley told the President that L.A. was a tinderbox that could blow up at any time. Others who attended the session say Bush ap-

peared concerned by Bradley's remarks but took no action.

TRADE

A brain drain could hinder Bush Administration efforts to negotiate trade deals with Japan. J. Michael Farren, Commerce Under Secretary for international trade, has become the latest in a string of top Japan experts to depart government. Farren, a tough and experienced negotiator not much beloved of his Japanese counterparts, will join the Bush reelection team. Earlier, two top Japan experts in the U.S. Trade Representative's office, S. Linn Williams and Joseph A. Massey, left for the private sector.

GERMANY

'THE EXODUS OF GERMAN INDUSTRY IS UNDER WAY'

Facing soaring labor costs and taxes, companies are moving more and more production to the U.S.

During a recent visit to New York, Daimler-Benz CEO Edzard Reuter delivered a warning that was ominous for Germany, but good news for the U.S.: He complained that the high cost of German labor was eroding Germany's competitive edge. As a result, "we will have to think about transferring [production abroad]." Indeed, he added, "this process is already on its way."

Reuter was signaling the beginning of what may be a big German push into North America. Germany's top companies have concentrated on pumping money into eastern Germany and central Europe for the past two years. But now, with their labor costs—already the world's highest—set to jump again, they are looking to move production from their home turf into major markets.

The U.S. suddenly looks mighty attractive to these companies. Lower wages are one draw. Another is a promise of the vast, integrated market that could be created through free-trade negotiations among Canada, Mexico, and the U.S. Says Alexander T. Ercklentz, a Germany specialist at Brown Brothers Harriman & Co., the New York investment bank:

"Many German companies feel they should have manufacturing in this country. They want cheaper labor, and they are concerned about barriers going up."

CAR TALK. In recent weeks, Germany Inc. has shown a strong interest in pursuing American activities (table). On May 5, Deutsche Bank board member Ronaldo H. Schmitz unveiled a drive to boost lending to U.S. corporations—moving into a vacuum left by cash-strapped Japanese banks. And Daimler-Benz, which has U.S. sales of \$7.5 billion from such units as Freightliner,



Daimler-Benz Trucks Made in North Carolina

A SAMPLING OF GERMAN MOVES IN THE U.S.

BASF

Acquires a Mobil plastics unit for \$300 million

DEUTSCHE BANK

Pumps up its lending to top U.S. corporations

BENCKISER

Buys fragrance-maker Coty from Pfizer for \$440 million

ROBERT BOSCH

Sets up fuel-injection venture with Penske

BMW

Looks set to build its first U.S. car plant

SIEMENS

Completes buyout of telecom maker Rolm from IBM

SOURCE: ASSOCIATED PRESS, BUREAU

Mercedes-Benz, and power- and electronics-equipment maker AEG, is developing what Helmut Werner, newly designated as Mercedes' next CEO, calls "a fully integrated concept for the Western Hemisphere." It's likely to include building Mercedes sedans in Mexico, initially for South American markets—but perhaps later for the U.S.

But BMW, Mercedes' rival, is mulling an even bolder move. Like many German companies, BMW has pursued an export strategy. But in a sharp break with tradition, it is studying sites for a \$1

billion plant outside Germany. While locating the plant in the U.S. is not a sure thing, two leading contenders are known to be Spartanburg, S.C., and Omaha. "The exodus of German industry is getting under way," says Eberhard von Kuenheim, BMW's CEO.

Auto analysts figure BMW could easily produce cars 20% more cheaply in the U.S. than in Germany. The gap is sure to widen: At home, BMW is facing a strike threat from the powerful IG Metall union to back up its demands for a 9.5% wage increase. Like other German

manufacturers, BMW doesn't think it can compete anymore from a domestic base that has the shortest workweek, longest vacations, and highest business taxes in the industrial world.

Germany's giants are responding by positioning themselves as strong players in Europe, the U.S., and the Far East. But the Far East is a tough nut to crack. Daimler Benz, for example, has been trying to negotiate strategic alliances with the Mitsubishi group for nearly two years. But in the U.S., the brakes are off. Daimler has already earmarked \$185 million for new investments in its Portland (Ore.) Freightliner operations. Having won a leading 23% share of the U.S. heavy-truck market, it is now pushing into midsize vehicles.

ONE SHOPPING. While many German companies prefer the tack of beefing up existing plants or starting from scratch, others are on the prowl for U.S. acquisitions. Current price tags look alluring, because many U.S. assets have been battered by recession and a torrent of downsizing sell-offs. In addition, the dollar—now worth 1.63 German marks—is still only half its mid-1980s peak. On May 7, electronics giant Siemens junked down the final installment of an estimated \$1.2 billion to buy Rolm Co., a maker of telecommunications equipment, from IBM. "We must push more production outside Germany," says CEO designate Heinrich von Pierer. Last year, Siemens spent more than \$270 million on U.S. acquisitions and investments, and an additional \$450 million in research and development.

The backbone of Germany's economy—the small and midsize companies known as the *Mittelstand*—is also trying to boost its competitiveness through establishing American presences. One aggressive outfit, machine-tool maker Rumpf & Co., is spending \$1.5 million a year expanding its Farmington (Conn.) operation. "The American market pushes us to innovate faster," explains chairman Berthold Leibinger. Already, one-third of its U.S. output is being exported to Europe and Japan. Some geeky companies are even planning to use the U.S. to take on global giants. Toy-maker Pilz is planning to square off with world leaders Sony Corp. and Berlebach by churning out 30 million CDs a year in the U.S.

In a sense, the Germans are playing a game of catch-up in America. Although a quarter of Germany's \$130 billion-plus foreign investment is stashed in the U.S., Germany has lagged way behind British, Dutch, and Japanese peers in recent years. But with plenty of incentives to leave the fatherland, they may soon be in the thick of the race.

by John Templeman and Gail E. Schares
Bonn, with David Greisinger in Chicago

GENTLEMEN, START YOUR MERGERS

Volvo and Renault are ready, and other European carmakers are talking

It would have been unthinkable a few years ago: France's state-owned producer of lackluster cars, Renault, talking merger with that upscale pride of Swedish industry and suburban U.S. driveways, Volvo. But times are changing for Europe's carmakers. Competition and costs are up. Profit margins and growth prospects are down. The shake-out is hitting Renault and Volvo. They're ready to merge, if they get a green light from the French government.

They're not alone. Around Europe, auto makers are chasing alliances as a

courted Peugeot in recent years, "and still does," says Peugeot Chairman Jacques Calvet. So far, Calvet says he isn't interested, apparently because Fiat wants to run the show. Struggling Porsche may fall to Volkswagen or Daimler Benz. Rolls-Royce cars are on the block. And Britain's Rover Group, 80%-owned by British Aerospace and 20% by Honda, could be next.

Even if full-blown marriages don't blossom, companies are stepping up efforts to build cars and components jointly to save cash. VW and Ford are building

a plant together in Spain, as are Peugeot and Fiat in France. Peugeot hopes to build transmissions with arch-rival Renault. With the Japanese coming, "it's unrealistic to spend \$500 million developing a new transmission alone," says Jean-Yves Helmes, head of Peugeot's auto division.

VOLVAULT? A debt-ridden weakling a few years ago, Renault has made a strong comeback under Chairman Raymond H. Levy. In his five-year tenure, Levy has cut employment 25% and launched sexier models, such as the subcompact Clio. It's a hot seller in Germany, where Renault is the top import. And two years ago, he and Pehr G. Gyllenhammar, Volvo's chairman, worked out an arrangement in which their companies



SHAKEOUT AHEAD: RENAULT CLIO ON A BAD ROAD SIMULATOR

cost-cutting antidote to harsh competition, particularly from Japan. Renault and Volvo would be the biggest deal yet, in a wave that has seen such specialty makers as Jaguar, Saab, and Alfa Romeo swallowed by larger players. The pain of restructuring is being eased by such EC protectionist tactics as limits on Japanese imports and exclusive dealer-networks that prop up prices.

After Renault, Italy's Fiat is the prime merger candidate: Its long-sheltered home market is vulnerable as Europe becomes a single market. It has

traded minority stakes, meshed purchasing, and shared parts.

Now, they propose putting the carmakers under a new holding company, probably 51%-owned by the French government. Volvo is expected to own 40%, the public the rest. Volvo is half Renault's size and in worse shape: It lost \$280 million last year on cars but made an overall profit of \$280 million on sales of \$12.9 billion because of trucks and stock holdings. Renault had a profit of \$560 million on sales of \$30 billion.

But Levy, who turns 65 next month,



THERE ARE TIMES WHEN FASTER IS DECIDEDLY BETTER.

Which is precisely why our new EP 9720 Pro Series copier was created. It makes quick work of even the most monstrous copying jobs.

First off, it turns out a rapid 71 copies per minute, even with legal-size documents. And it's as efficient as it is fast.

With standard features like a 20-bin stapler/sorter that produces finished sets in a flash.

And a unique feeder design that lets you copy continuous computer forms without separating them.

Not to mention Minolta's remarkable S.M.A.R.T. system, which automatically reports copy counts and schedules preventive maintenance via a direct link to your dealer's service department.

Sure, there are other ways to make copies. But if speed is of the essence, we strongly suggest that you call 1-800-9-MINOLTA. Pronto.



COPIERS AND FAX MACHINES
ONLY FROM THE MIND OF MINOLTA



won't be around to see the results of his efforts. He's retiring, and his likely successor is Renault's 49-year-old finance director, Louis Schweitzer, a grand-nephew of humanitarian Albert Schweitzer. He's proud of having cut Renault's debt to 10% of sales, vs. 40% in the past. "It's still too high," he says, "but now we're a normal company."

VANISHING NICHE. Schweitzer and Gyllenhammer, who would probably alternate as CEO of the merged company, see huge savings from joint component development and other areas. Next year, a Volvo engine will power a new Renault model, saving the French company \$180 million. Volvo now sells Renaults in

Scandinavia, and Renault distributes Volvos on the Continent. The alliance will save Volvo \$660 million a year by the mid-1990s, Gyllenhammer believes. Such savings are crucial: Some analysts think that without a partner such as Renault, this medium-size niche player faces extinction.

It's a fate that may confront other European auto makers as well. To prevent that from happening, Old World auto companies are likely to be busy kicking tires and talking deals in coming months.

By Stewart Toy in Paris, with Mark Maremont in London and John Rossant in Rome

ready have seized several of the importer's shipments, valued at \$5.6 million.

Smaller importers are the first to feel Q-Tip's impact. On May 5, a New York grand jury accused three Chinese officials of conspiring with two U.S. companies to evade Customs duties of more than \$100,000 by undervaluing goods from China. The U.S. companies are Sunlight International Inc., a New York City sales agent for a Chinese textile manufacturer, and C&H West Merchandising Inc., a California importer. Sunlight declined comment, and C&H President Robert Hsu says his company "did nothing wrong." But John Mallamo, senior special agent in Customs' fraud-investigation division, says "the evidence is very strong." Defendants could face up to five years in prison and \$250,000 in fines. Customs has referred 15 other cases to the U.S. Attorney in New York, and 50 more are pending.

FISHY SOURCES. To protect American manufacturers, the U.S. sets quotas on apparel for many countries. Customs agents have been amassing evidence that China's textile industry and U.S. importers have been cheating for years on these quotas by undervaluing or transshipping through third countries about \$2 billion worth of goods annually. The cost: more than \$300 million yearly in unpaid duties, Customs officials say.

Taiwan is a main target. Faced with rising labor costs, Taiwanese garment makers have been secretly farming out U.S. orders for clothing to factories in China. In February, the U.S. cut Taiwan's quotas an average of 8.3%. Taiwan has since cracked down—and its bombshell report has put major U.S. retailers in the hot seat.

Some companies named say they can't even verify that the shipments took place. "We are checking our records against the report, but we are not aware of any [illegal] shipments," says Kmart Assistant General Counsel James C. Tuttle. The report also claims that apparel maker Bugle Boy Industries Inc. received illegal shipments from Taiwan and Vietnam. Bugle Boy Chairman William Mow says he canceled an order suspected of coming from Vietnam after learning in November that his Taiwan supplier was farming out business there.

Many apparel experts argue that the quota system should be abolished. They want to see the U.S. set a ceiling on total imports of clothing and let the market decide where they are produced. But for now, Customs remains on the trail of quota cheaters—and U.S. officials think Q-Tip will swab out the violators.

By Amy Borrus in Washington, with Bruce Einhorn in Taipei and Pete Engardio in Hong Kong

CHINA

WILL A CUSTOMS DRAGNET SNAG BIG U.S. RETAILERS?

Taiwan names companies that allegedly received illegal imports



AGENTS CHECK CHINESE GOODS

It's called Operation Q-Tip, short for quota transshipment import practices. It's the most massive investigation ever launched by the U.S. Customs Service in an effort to crack down on illegal imports of textiles and apparel from Asia. Some 600 agents have led raids on scores of small companies, seizing 11 million documents and \$10 million in bank accounts and other assets.

As Customs' dragnet widens, some major retailers may be caught in the web. In a key move, the U.S. turned up the heat on Taiwan, long suspected of slapping "Made in Taiwan" labels on goods made more cheaply in China. In a conciliatory gesture, the Taiwanese government submitted a report that was a

shocker: It turned the spotlight on several brand-name U.S. companies. The report says Kmart, Bugle Boy, U.S. Shoe, Dress Barn, and others allegedly received illicit shipments of clothing from Taiwanese exporters. The companies deny any wrongdoing, and even Taiwanese officials insist that the exporters did not tell the U.S. buyers that the transactions were illegal.

Customs Commissioner Carol B. Hallack acknowledges that her agency is investigating unnamed retailers. In fact, Customs officials in Cleveland and Los Angeles are closing in on a major clothing importer and wholesaler suspected of illegally bringing about \$60 million of Chinese goods into the U.S. Agents al-



Who shows the flag for Engineering?

Trafalgar House.

Because, through John Brown and Davy, Trafalgar House has created one of the world's leading engineering and construction businesses, with more than 50 offices worldwide.

With 26,000 staff who design and construct advanced plants and facilities for the process, power, oil and gas, and metals industries.

With a range of proprietary and licensed technology that is unrivalled.

We are proud that it flies the colours of Trafalgar House.

A world-scale business serving world-scale industries and clients.

JOHN BROWN

Trafalgar House Public Limited Company, 1 Berkeley Street, London W1A 1BY.



TRAFALGAR HOUSE

A World Force in Engineering.



Incredibly Swiss.



Incredibly Credit Suisse.

For incomparable global clout, rely on Credit Suisse U.S.A. We're a recognized leader in the world's financial markets, combining vast resources with the discreet, reliable and committed service that is the hallmark of our Swiss heritage. Let our worldwide presence and highly rated financial strength be your passport to stronger global finance.



Atlanta • Chicago • Houston • Los Angeles • Miami • New York • San Francisco

NATO: A NEW MISSION FOR AN OLD COLD WARRIOR

When Western foreign ministers gather in Oslo on June 4, they are likely to create a bold new mission for the North Atlantic Treaty Organization. In a break with the tradition confining NATO military operations to Western Europe, sources say the ministers will approve plans to use NATO troops as peacekeepers in eastern Europe and points beyond. In fact, NATO sources say that NATO troops might be sent this summer to try to quell the savage Armenian-Azerbaijani conflict in Nagorno-Karabakh.

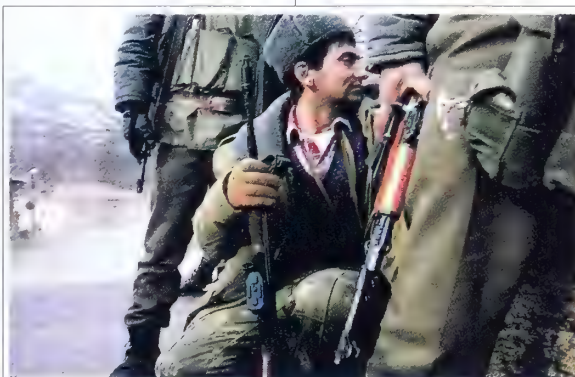
If the shift goes through, it will be important for the Bush Administration, which has been working feverishly to remake NATO to give the U.S.-led organization staying power in a post-cold war Europe. The Administration and some European leaders are worried that with the demise of the Soviet threat, the European community led by France will move toward an all-European defense policy that will eventually box out the U.S. Plans for a Franco-German army corps also spur American unease. "Everything is up for grabs in this period," says a senior U.S. diplomat in Europe. "That's why we must make NATO more relevant for the future."

WEAK RIVALS. But some critics think the Administration is taking unnecessary risks by tampering with NATO's identity. In fact, the political and security uncertainties following the Soviet collapse has caused NATO's stock to rise, not fall, in Europe. At the same time, such potential successors to NATO as the Conference on Security & Cooperation in Europe (CSCE) and the Western European Union have made little progress. Allowing the stability provided by the U.S. influence, the Europeans are likely to wind up allowing the U.S. to cut its troops and cash outlays to NATO while still retaining leadership. Still, the Administration seems convinced of the necessity to

make NATO into some kind of all-encompassing body. In recent months, NATO has welcomed 10 former Soviet republics from as far away as central Asia into a new partnership council already expanded to include Moscow's former satellites in Eastern Europe. U.S. officials even talk up the possibility of eventual NATO membership for Russia.

FEWER DOUBTERS. U.S. proposals to use NATO assets to check ethnic and regional flare-ups are gaining support from the doubters, including Germany and even France. The reason: After being unable to quell the civil war in Yugoslavia, the EC is eager to avoid another fiasco somewhere else. And the former Soviet republics are asking NATO to fill the vacuum left by the withdrawal of Soviet forces. "If these are going to be the dominant security problems in Europe, we can't shy away from them," says an American NATO official.

In Oslo, NATO officials aim to agree on a plan first tabled by the Dutch to provide up to 15,000 troops on a case-by-case basis to the 52 member CSCE, which includes European nations, Russia, and the U.S. The troops would be available for tasks ranging from crisis management to enforcing



AZERBAIJANI FRONT: NATO TROOPS MIGHT BE SENT IN

arms embargoes.

But the plan still seems fraught with obstacles. For one thing, the first request for NATO forces is likely to revive the divisive gulf war-era debate over whether such NATO members as Germany would assign troops beyond its borders. Sending U.S. troops into some obscure battleground in the former Soviet Union or Eastern Europe would also be highly risky. Any U.S. casualties could create an isolationist backlash at home that might do far more damage than any French machinations to thwart the efforts to stay engaged in Europe.

By Bill Javetski in Paris and Patrick Oster in Brussels

GLOBAL WRAPUP

MEXICO

Reverberations from April's deadly explosions in Guadalajara are shaking the state oil monopoly, Petróleos Mexicanos. Long a symbol of Mexican nationalism and a den of secrecy, Pemex is being asked to divulge its inner workings—even to foreigners.

Responding to pressure to answer for the tragedy that killed about 200 people, President Carlos Salinas de Gortari called in engineering giant Bechtel Corp. to inspect Pemex installations and review safety issues throughout the country. If the Bechtel report traces safety problems to Pemex' convoluted chain of command, it

could give Salinas a chance to revamp the oil giant. So far, he has opened small doors for foreign contractors while pounding away at the once-powerful oil union to cut the work force from 210,000 to 155,000. But his privatization campaign has yet to touch Pemex, Mexico's last sacred cow. If the report provides Salinas with enough evidence of disarray, he could spin off pieces of the oil business, from petrochemical plants to tankers.

LIBYA

Tougher economic sanctions may be imposed later this summer if Libyan leader Muammar Qaddafi fails to hand over the two suspects in the De-

cember, 1988, bombing of Pan American World Airways Inc. Flight 103 over Lockerbie, Scotland, say U.S. officials. Among the options now under consideration are an embargo on Libyan crude and a ban on exports of high-tech oil-field equipment to the North African country.

Shutting off Libyan oil would run the risk of driving prices from the current level of \$21 a barrel to the \$25-a-barrel range, according to Ann-Louise Hittle, an analyst at Shearson Lehman Brothers Inc. That's because Libya is a major supplier of hard-to-replace light, sweet crude to Western Europe. The country furnishes 28% of Italy's oil and 16% of Germany's.



IMMUNEX IS THE BIGGEST OF SEATTLE'S BIOTECH COMPANIES

PACIFIC NORTHWEST

HIGH-TECH HEAVEN

Why the Pacific Northwest is surging with technology startups

If anyone ought to be loyal to Silicon Valley, it's James B. Moon. He grew up there, studied engineering there, and joined Intel Corp. Then in 1979, Intel moved his operation to Oregon. He agreed to go, even though many staffers refused: They considered it a high-tech hinterland. During the 1980s, however, Moon watched dozens of technology companies spring up and succeed in the Northwest. In 1986, he started his own company to make portable patient monitors. His Protocol Systems Inc. nearly doubled its sales last year, to \$23 million, and went public in March. Does Moon long for the daylong traffic jams of Silicon Valley? "You couldn't pay me enough to go back," he says.

Executives at Seattle's latest, hot biotech company, CellPro Inc., echo the sentiment. So do those at Portland's E-Machines, which makes 16-inch color monitors

for Apple Macintosh computers. And so do those at Nexus Engineering Corp., a Vancouver (B.C.)-based maker of satellite receiving equipment for cable TV. In fact, many from California and elsewhere take pay cuts to work at one of the hundreds of high-tech companies that have mushroomed in the Northwest.

BEYOND LOGS. As a result, the Pacific Northwest is emerging as more than just Boeings and raw logs. It is gaining a surprising new reputation: as a source of cutting-edge technologies. Some of its stories are familiar: Microsoft Corp., in Redmond, Wash., grew from a puny, \$24 million company in 1982 to a \$1.8 billion giant dominating the PC software industry. Portland, Ore., is a world leader in parallel-processing computing, as home not only to Intel's supercomputer division but also to Sequent Computer Systems Inc., an Intel offshoot.

Portland also houses the Intel division working on the P6 chip, the next generation of chips for PCs.

But many Northwest successes are smaller and less well-known (map, page 52). Aside from Microsoft, the Northwest is home to 1,500 other software companies, including Aldus Corp., whose PageMaker revolutionized desktop publishing. Immunex Corp., with its LEUKINE cancer-treatment drug, is the biggest of nearly 50 biotech companies in Seattle. Quadra Logic Technologies Inc. of Vancouver, B.C., is in final clinical trials for a photosensitive drug that can target tumors.

It's even possible the Northwest will crack the top tier of America's technology centers. Already, it is breaking out of the second tier, comprising such areas as San Diego, Austin, Tex., and North Carolina's Research Triangle. At the same time, Boston's famous Route 128 is suffering because of troubles at companies such as Digital Equipment Corp. Taken as a whole, the three-state, one-province Northwest has 100 companies in biotech, 600 in electronics, and 1,000 in environmental businesses in addition to its software houses.

How did it happen? Part of it is a quality of life that attracts technical talent. Forest-lined freeways. Short commutes. Hiking. Skiing. Sailing. Affordable housing. Low crime rate. Clean air. "The type of person who goes into software is more likely to be traipsing the canyons of the Cascades than

The printer with a split personality.



© 1992 Hewlett-Packard Company. *Suggested U.S. list price: PE12302.

The HP DeskJet 500C.
Prints crisp black &
white and color for only
\$1,095*.

Sometimes the Hewlett-Packard DeskJet 500C is a black and white printer. Smart-looking, formal, very businesslike. And because it's a Hewlett-Packard inkjet printer, it gives you laser-quality printing with clean, crisp type and graphics. For a very logical price.

But other times the DeskJet 500C is a color printer. Just snap in a cartridge and check out its wilder side. Get the same clear, sharp print quality. But in color. Choose from thousands of different shades to really make your proposals and presentations come to life.

Get the HP DeskJet 500C for PCs or the DeskWriter C for Macintosh. Both

come with HP's three-year limited warranty. They print on plain paper or transparency and work with all the popular software. They're easy to use and small enough to fit on your desk.

To see a demonstration of how the DeskJet 500C or DeskWriter C can add some personality to anything you print, call **1-800-552-8500, Ext. 3069** for a print sample and the name of the authorized HP dealer nearest you.



**HEWLETT
PACKARD**

A SAMPLING OF THE NORTHWEST'S HOTTEST HOMEGROWN COMPANIES

DOLLAR FIGURES ARE REVENUES FOR LATEST FISCAL YEAR

SEATTLE, WASH.

MICROSOFT \$1.8 billion
Personal-computer software

ALDUS \$168 million
Desktop publishing software

IMMUNEX \$63 million
Drug to stimulate white blood cell growth

CELLPRO \$1 million
Cell separation systems

PORTLAND, ORE.

MENTOR GRAPHICS \$400 million
Electronic design automation

SEQUENT COMPUTER SYSTEMS \$213 million
Open-system parallel-processing computers

LATTICE SEMICONDUCTOR \$71 million
Programmable-logic devices

PLANAR SYSTEMS \$50 million
Electroluminescent flat-panel displays

E-MACHINES \$30 million
High-resolution 16-inch monitors for Macs

VANCOUVER, B.C.

MACDONALD DETTWILER \$60 million
Integrator of satellite systems

NEXUS ENGINEERING GROUP \$35 million
Satellite communications and cable TV equipment

QUADRA LOGIC TECHNOLOGIES \$1.3 million
Light-activated drugs to treat cancer

RICHMOND TECHNOLOGIES & SOFTWARE
Under \$5 million
Contact management software

SPOKANE, WASH.

KEY TRONIC \$141 million
Computer keyboards

BEND, ORE.

CONSEP MEMBRANES \$16.5 million
Pheromone-based products for insect control

BOISE, IDAHO

MICRON TECHNOLOGY \$425 million
Memory chips

EXTENDED SYSTEMS \$25-50 million
Computer printer interface

the canyons of New York," says Bruce D. Milne of Corum Group, a Bellevue (Wash.)-based software consultant.

Although the region still has gaps in its high-tech infrastructure, its rainy but pristine environment makes it easy to lure the talent to plug those holes. J. Basil Peters, 39, chairman and CEO of Nexus Engineering, for example, recently recruited an engineer who had job offers from four companies elsewhere. "I told him, 'I'll pay you \$10,000 less to work here,'" Peters recalls, "but you can go to a world-class ski resort in an hour and half." Another recruit from back East had been commuting an hour each way. Now he has a 10-acre homestead much closer to the office.

There is a happy confluence of other factors as well. The flow of U.S. government research funds has helped, especially in creating advanced biomedical technologies in Seattle and environmental cleanup systems in Richland, Wash. Unlike California, governments have refrained from burdening companies with heavy regulatory requirements and workers-compensation expenses. California—and Japanese—companies appreciate the lower operating costs. Both Intel and Hewlett-Packard Co., for example, have their largest single manufacturing site in the Northwest, not in California.

But perhaps the most critical factor was the early success of a few key companies, including Tektronix, Microsoft, MacDonald Dettwiler, Mentor Graphics, and Sequent. This helped create a business climate that

let startups and spin-offs take off at an astonishing clip. Such well-known successes as William H. Gates III and George B. Rathmann, who left Amgen Inc. in California to start up Icos Corp. in Seattle in 1990, have been inspirational. "When you see successful companies happen, you think, 'Gee, I know that guy. I could do that, too,'" says Woody Howse of Cable & Howse Ventures in Bellevue, Wash.

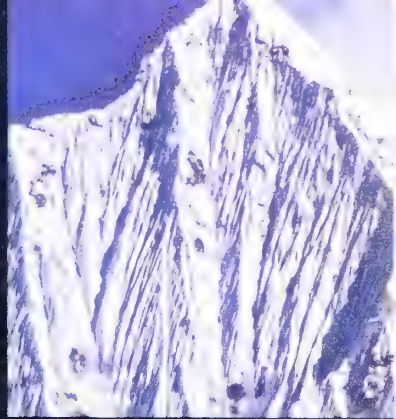
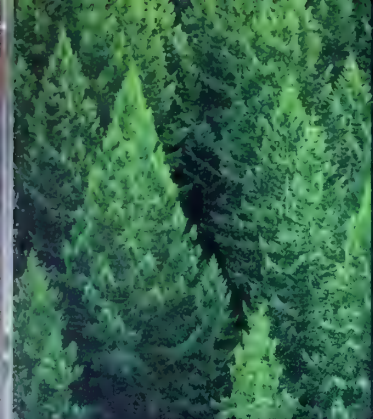
There are some limits to Northwest's technology heaven. One is jobs. Although they pay well, the high-tech businesses only provide about 5% of the region's employment. Also missing is the richness and depth of university technical talent found in Silicon Valley or Boston. Oregon especially lacks a world-class research facility. Other shortcomings are that many smaller companies never achieve the size they need to compete against California's giants. They either fail or sell out to bigger rivals. **GONE GLOBAL.** But overall it is clear that the Northwest has established a critical mass in electronics, biotech, and software that will dramatically alter the composition of its economy in coming years. "Everything from business ethics to infrastructure to quality of life just fits," says E-machines founder Steve Vollum.

One key to the region's emergence has been a tendency to go international more enthusiastically than other U.S. companies. Because the Northwest is distant from major U.S. markets, many entrepreneurs have strong trade links with Asia and Europe. Some 57% of Microsoft's sales

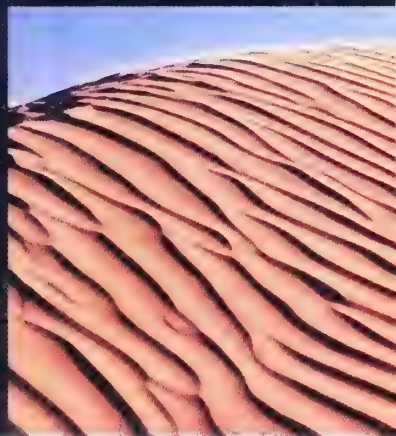
are outside the U.S. Sales of Sequent's parallel-processing computers are growing faster in Europe than in the U.S. Mentor Graphics Corp., of Wilsonville, Ore., leads the world in electronic design automation.

The outside world has been slow to recognize the Northwest's technological strengths, partly because key companies are concentrated in different pockets. Seattle and the "technology corridor" in its eastern suburbs of Bellevue, Redmond, Kirkland, and Bothell are strong in software, biotech, and medical devices. Portland and its "Silicon Forest" suburbs of Beaverton, Hillsboro, and Wilsonville specialize in electronic hardware, including semiconductor chips and supercomputers. Boise, Idaho, home of Micron Technology Inc., has moved from potato chips to memory chips and laser printers.

This high-tech proliferation hasn't come a moment too soon. The region is experiencing a double whammy that in previous eras proved to be crippling. One blow comes from Boeing Co., which is shedding jobs because of defense cutbacks and lower demand for smaller planes. At the same time, about 10% of the lumber mills in the Northwest U.S. have been shuttered because of efforts to protect the spotted owl. Yet the Pacific Northwest has remained far healthier than other parts of North America because high-tech industries form the fastest growing sector of the regional economy. In British Columbia, computer-related businesses may overtake tourism, mining, and fishing to become the second-



**Some companies search the four
corners of the world for the most advanced
telecommunications technology.**



**Curious, isn't it, when half the Fortune 500®,
more than two hundred universities
and most major telephone companies have
already found it.**



Technology the world calls on.

A

The unique SKAGLEN watch.

WATCH

Case and adjustable band of solid titanium.

WITH

Scratch resistant mineral crystal.

MANY

Precision Swiss made quartz movement.

SHARP

Water resistant case.

POINTS.

For men or women: \$96 For both: \$175



CALL

To order: 1-800-932-5514, 7 days a week.

Or mail order to:

Men SK-1125 Women SK-1126 Both SK-1127

Send final payment.

30-day money back guarantee.

American Express, VISA, MasterCard

Corporate gift accounts 212-551-0860



Regions

largest industry in the province by 1996.

All this has California, still the nation's leading technology incubator, looking nervously to the north. Many of its companies are flirting with the idea of leaving: They complain about high taxes, environmental laws, workers-compensation rules, and expensive land. According to an Ernst & Young survey released in March, more than 90% of California companies say they are considering escaping. "We have our hands full retaining the companies we have," says William W. Otterson, Director of CONNECT, a program to nurture San Diego's high-tech industry.

The first two California companies to discover the Northwest in a big way were Hewlett-Packard and Intel. HP's regional employment has grown to 9,400 people, who develop and make notebook computers and print-heads in Corvallis, Ore., ink-jet printers in Vancouver, Wash., and laser printers in Boise. All these divisions are still growing. Intel now employs 4,200 in the Portland area and expects to expand as its Hillsboro-based supercomputer project progresses.

Japanese companies, too, have discovered the Northwest. Since 1984, some 25 Japanese electronics companies have invested more than \$750 million in the Northwest, employing more than 6,300, according to Portland consulting firm Rubicon International. Epson makes printers, Fujitsu, disk drives, and NEC, fiber-optic telecom systems in the Portland suburbs. Sharp and Matsushita also have major chip-related investments. More are coming: Fujitsu and Toshiba both plan to build semiconductor plants near Portland.

What distinguishes the Northwest from other U.S. technology regions such as the Research Triangle is its ability to spawn startups, not just attract big outside investors. The majority of the region's high-tech companies are homegrown. In addition to Microsoft's Seattle-born Bill Gates, Tektronix founders Howard Vollum and Jack Murdock and the two founders of MacDonald Dettwiler, a \$60 million integrator of satellite systems, all hail from the region.

PRIZE WINNER. Hundreds of smaller companies have spun off from them. Tektronix alone spawned at least 22 spin-offs, ranging from \$400 million Mentor Graphics to a number of smaller companies: Photon Kinetics, a maker of fiber-optic testers, TriQuint Semiconductors, a maker of gallium arsenide semiconductors, and chip-designer Bipolar Integrated Technology (BIT).

Seattle's thriving biotechnology industry

consists mostly of spin-offs—not from private companies but from research institutions. The University of Washington now ranks third among U.S. universities in receipt of federal research dollars, some \$356 million last year. It has spun off such companies as ZymoGenetics Inc., a yeast genetics research company now owned by Novo Nordisk of Denmark. The other catalyst has been the Fred Hutchinson Cancer Research Center. The \$92 million nonprofit institution has, directly or indirectly, spawned four of Seattle's six publicly traded biotech companies: Immunex, NeoRx, CellPro, and Icos.

Much of the nation's most exciting research in environmental technology is being done at Pacific Northwest Laboratories by Battelle Memorial Institute in Richland, Wash., near the Hanford Nuclear Reservation. The Energy Dept. is spending \$218 million to build a lab run by Battelle that will research using microbes to clean up contaminated groundwater and "vitrification," a technique for containing wastes by

encasing them in a glasslike substance.

To make the leap into the first class of technology centers, the Northwest will have to overcome some large obstacles. One is out-moded taxes. Washington State still taxes companies based on gross revenue rather than on profit. This especially hurts biotech companies, which usually struggle through as many as 10 years of re-

search before having a salable product.

Smaller young companies find it hard to get venture capital. Although Seattle, Portland, and Vancouver, B.C., all have venture-capital firms, the big money is still in New York and California. "There are fewer places for small Seattle firms to go, unless they pack up their business plan and go to California," says Immunex President Stephen A. Duzan.

Whatever the frustrations, the Northwest's entrepreneurs argue they are building an important technology center of the future. It's more than pretty mountains, of course, that will do it. It is a potent mix of cost structure, a flair for individualism, key institutions that inspire risk-taking, and stimulative outside investment. That's a delicate balancing act, not a model government bureaucrats can establish by fiat. But as long as it nurtures a flock of software engineers, biotech whizzes, and computer geniuses, the Northwest will most certainly continue its ascent to high-tech heaven.

By Dori Jones Yang in Bellevue, Wash.

**The Northwest
has now reached a
critical mass in
electronics,
biotech, and
software that will
shape its future**

KNOWLEDGE IS POWER.

In the investment banking world, there are many definitions of power. Some firms assert themselves with capital. Some see strength in numbers. Still others strive to be all things to all people.

At Alex. Brown & Sons, we've always believed that knowledge is power.

A reliance on knowledge is apparent in all we do. In technology, health care, consumer, environmental, media and communications services, transportation, and financial services, our expertise is characterized by broad and deep industry knowledge and firmwide coordination of expertise.

In our relationships with clients — whether individual, institutional, corporate

or municipal — our top priority is understanding their needs.

Knowledge provides the foundation for developing creative solutions to our clients' problems. From our underwriting of one of the nation's first equity issues, to our work today for companies at the leading edge of their industries, we strive to deliver the best ideas and most effective solutions.

Superior knowledge is the basis for our performance orientation. Our primary objective, simply put, is to make money for our clients.

Relying on knowledge is an age-old concept. At America's oldest investment bank, we're proving that old doesn't have to be old fashioned.



ALEX. BROWN & SONS
INCORPORATED

Two Centuries of Solutions



IN NEW ORLEANS: WEIN'S COMPANY PRODUCES 35 FESTIVALS EACH YEAR

THE MAN WHO KEEPS JAZZ ON THE 'A' TRAIN

How promoter George Wein makes music with Corporate America

The music is starting to sizzle. As the sounds of a wailing saxophone blend into the steady beat of a bass and drums, a full house is swaying to the jazz classic *Satin Doll*. One solo leads to the next, and each volley takes the quintet a little higher. Before long, it's unclear who's more excited, the band or its audience.

On the piano, George Wein glides his fingers across the keys as smoothly as wind sweeping sand. He's not the star, and his gentle solo isn't flashy, but his steady playing provides the band's foundation. With his round face creased by a laid-back grin and his eyes shut in concentration, Wein

leads the quintet to a crescendo. When it's over, the room erupts in applause, and his face breaks into a satisfied smile.

That's George Wein, sometime bandleader and jazz music's biggest impresario. Low-key and unassuming, the 66-year-old Bostonian hardly exudes the hip, showbiz persona of his ilk. Yet without him, such legends as Dizzy Gillespie and Lionel Hampton might still be playing for chump change in smoke-filled dives. Wein's company, Festival Productions Inc. (FPI), is the world's largest producer of corporate-sponsored music festivals. By marrying music and deep-pocketed advertisers, Wein has helped put an American art form back on the A train. Says acclaimed jazz trumpeter Jon Faddis: "Without George's festivals, a lot of jazz musicians wouldn't be working."

Since Wein masterminded the first New-

port Jazz Festival in the 1950s, his catalog of festivals has grown to 35 each year, including such blockbusters as the New Orleans Jazz & Heritage Festival, the JVC Jazz Festival New York, and the JVC Grande Parade du Jazz in Nice (table). He's a consultant to some 120 others. Since 1985, a resurgent interest in the genre has boosted global jazz record sales from \$143 million to \$390 million, and Wein's festivals have both stoked and benefited from the trend. Still, jazz recordings make up only about 5% of the \$7.5 billion music market, and Wein's mission is to keep the money flowing. "I just don't want the music I love to die," he says.

OBSESSED. Wein discovered early on what ballet companies, symphonies, and art museums are now learning the hard way: Certain art forms need corporate dollars, not just ticket sales, for sustenance. Wein's first Newport festival was launched with a mere \$20,000. Today, companies such as JVC Corp. of America, Philip Morris USA, Playboy Enterprises, and Ben & Jerry's Homemade pump in over \$8.5 million annually to sponsor festivals in the U.S., Europe, and Japan. Says *Rolling Stone* writer David Fricke: "Wein's festivals have kept the music in front of the public during jazz's lean years and its peak years."

Wein has been obsessed with jazz since the 1940s. Although his parents insisted he study premed as an undergraduate at Boston University, he was more interested in practicing piano than medicine. He started moonlighting with a quartet at a local nightclub, and before long he was booking road dates. He quickly learned that a single gig at a college raked in more money than two weeks at the nightclub. "I was adequate at playing piano," recalls Wein, who in his spare time leads a group called the Newport All Stars. "But I was very good at creating work for the band."

After he graduated, Wein tapped his \$5,000 in savings to open a Boston nightclub called Storyville. The club developed enough élan to lure premier jazz artists at affordable weekly rates, from the Count Basie Orchestra (\$3,500), to Duke Ellington's band (\$4,000), to the Louis Armstrong All Stars (\$5,000). Over 10 years, Storyville never turned a profit. But, says Wein, "I learned my trade there. I got to know my

GEORGE WEIN'S GREATEST HITS

NEW ORLEANS JAZZ & HERITAGE FESTIVAL

350,000 attended over 10 days in 1990, 1991, and 1992
Sponsors: Miller Brewing, Ray Ban, Coca-Cola, and M&M/Mars

NEWPORT JAZZ FESTIVAL

140,000 attended for four days and three nights in 1969
Sponsor: Jos. Schlitz Brewing

JVC GRANDE PARADE DU JAZZ

Nice, France. 90,000 attended over 11 nights 1985-91
Sponsor: JVC Corp. of America

JVC JAZZ FESTIVAL NEW YORK

New York City. 100,000 attended over 10 days in 1991
Sponsor: JVC Corp. of America

At Toyota, we couldn't conceive of aiming for high standards in the all-new 1992 Camry, without aiming for those same standards in the people who build it. That's why every Toyota Camry that is manufactured at the Georgetown, Kentucky, plant is a



car these employees can identify with. Like the car, they are uncompromising, with an attention to detail that goes beyond the expected. And they're not content just to rest on the heritage of Toyota quality, they strive for continued improvement. In fact, because

of people like them, automotive standards in this country are being raised every day. But, the one thing all 4,000 employees of Toyota Motor Manufacturing in Georgetown, Kentucky, want you to know is, the 1992 Toyota Camry is not just a car they can be proud of, it's one you can be proud of, too.

INTELLIGENT. STRONG. RELIABLE. AND YOU SHOULD SEE THE CAR THEY BUILD.



THE ALL-NEW 1992 CAMRY.

WE JUST COULDN'T LEAVE WELL ENOUGH ALONE.



"I love what you do for me."



Call 1-800-GO-TOYOTA for a brochure and location of your nearest dealer.
Get More From Life... Buckle Up! ©1991 Toyota Motor Sales, U.S.A., Inc.

The Graduation Memory. J.C. Henry Carry



Crafted to Express A Lifetime

CROSS
SINCE 1846

G R A D U A T I O N — 1 9 9 2

UNQUESTIONED LIFETIME MECHANICAL GUARANTEE.

Made in America?

A compelling four-hour PBS series:
How will American manufacturing
compete in the global economy of the
90's...and beyond?

The Chubb Group of Insurance
Companies is proud of its role
as corporate funder for
Made in America?

Tues., May 26th

Wed., May 27th

8-10pm ET

Check local listings.



The Chubb Group of Insurance Companies, for over 100 years providing business and personal insurance worldwide through independent agents and brokers

58 BUSINESS WEEK/MAY 25, 1992

People

musicians, what they wanted, what their fears were, what their pride was."

His first big break came in the summer of 1954, when Louis and Elaine Lorillard, heirs to the Lorillard tobacco fortune, tapped him to stage a jazz festival near their summer home in Newport, R. I. Wein took a flat fee, promoted the event, and hired 65 of the day's top jazz artists, including Eddie Condon, Pee Wee Russell, and Ella Fitzgerald.

The early Newport festivals developed the Wein formula. His secret was shuffling big names in various combinations during the festival, rather than the usual approach of having each one appear individually on a single day. Cooks were hired to dish up homemade food while local artisans displayed their wares. The result was an event, not just a concert. Says marketing consultant Lesa Ukman, president of International Events Group: "Not only was George the first producer of nonsport events to work with corporate sponsors, but he was also the first to realize the whole is bigger than individual acts." By 1969, Newport's success convinced Milwaukee's Jos. Schlitz Brewing Co. to spend a then-extravagant \$120,000 to sponsor a 20-city tour dubbed the Schlitz Salute to Jazz.

'NATURAL FIT.' These days, festivals of all kinds have become big business. Ukman estimates that corporate sponsorship of fairs and festivals in North America alone has nearly doubled since 1988, to about \$290 million. Wein is still at the forefront. While the 22-year-old New Orleans festival is his most popular production, his JVC-sponsored festivals make up his bread and butter. Last year, JVC Corp. of America pumped \$3 million into 11 festivals throughout the U. S. and Europe, drawing more than 300,000 people. Says J. Kevin Weinhoeft, JVC's national sales and marketing manager: "It's a natural fit. What better genre of music than jazz to show off audio equipment?"

While Wein has plenty of fans—he once played piano for President Jimmy Carter—he also has his detractors. Some complain that he too often features old music and aging headliners, bypassing younger, avant-garde musicians. This year's New York festival, says *New York Times* pop music critic Jon Pareles, "is kind of necrophilic. About half of the acts are tributes to people who died."

Rolling Stone's Fricke, however, argues that "while Wein's festivals may not be on the cutting edge, they draw people into the music." And as long as jazz is flourishing, Wein is happy. "Sure, I prefer the music of the swing era, Benny Goodman, Duke Ellington, Count Basie," he says. "But hey, I'm dedicated to the art." He's also dedicated to the art of making the art sell.

By Ron Stodghill II in New York

PEOPLE

You've heard what the political candidates have to say about health care reform. Now perhaps you'd like to hear from America's doctors.

Health care reform is high on our nation's agenda.

In recent months, several health care bills have been put before Congress. Proposals range from mild reform to radical overhaul.

There's little question that the American people are asking for change.

Millions of full-time employees and their families are now living without health insurance because of its cost.

Those who have insurance often lose their coverage when they change jobs, simply because of a prior illness.

And Medicaid, the public health care program that was created to help the poor, currently excludes more than half of those desperately needing care.

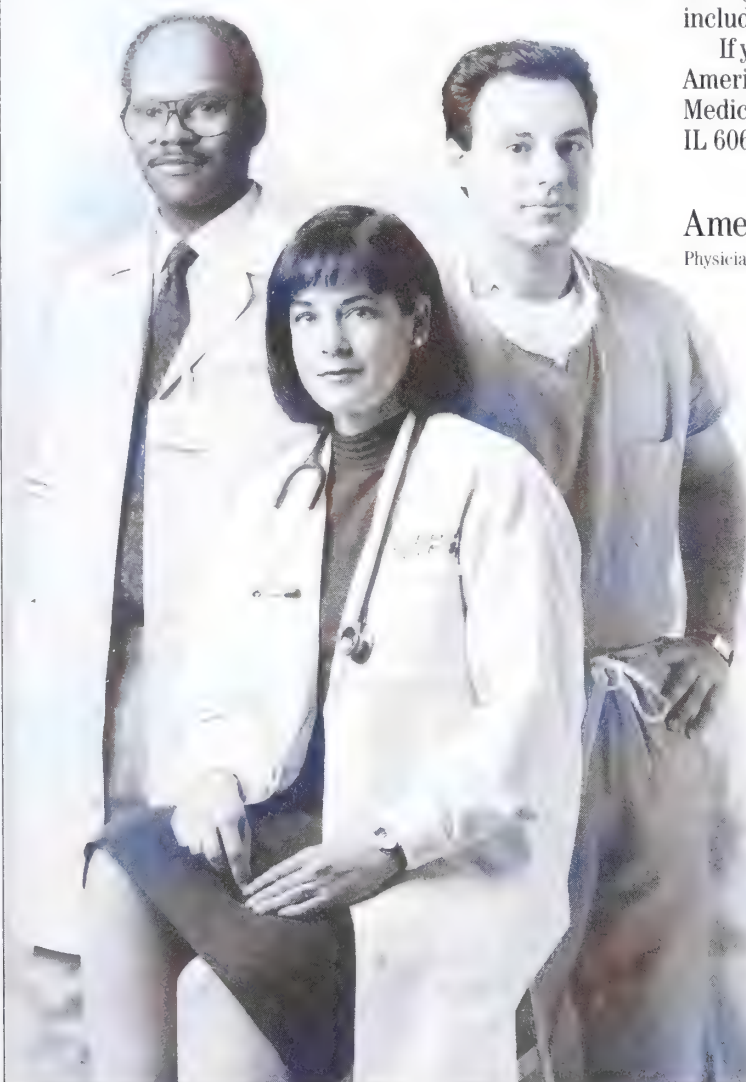
The 300,000 member physicians of the American Medical Association think this is wrong. We believe our system *must* be improved. And we have a proposal, called Health Access America, that will provide affordable health insurance to *all* Americans, while containing costs and preserving individual freedom of choice.

Most people in this country *do* receive high quality medical care. But 35 million Americans are falling through the cracks in the system. Shouldn't they be included, too?

If you would like to learn more about Health Access America, write Dr. Jim Todd, Dept. 401, American Medical Association, 515 North State Street, Chicago, IL 60610. Or call us today at **800 621-8335**.

American Medical Association

Physicians dedicated to the health of America





BEFORE YOU
CAN SERVICE A
COMPANY LIKE
SEA-LAND,
YOU'VE GOT
TO KNOW YOUR
WAY AROUND
THE WORLD.

Linking a communications system that extends around the globe is a job that demands a world-class player.

So when Sea-Land Service, Inc., looked to upgrade its international communications network, the company it looked to was ROLM.

"Our greatest business opportunities lie in the Asia-to-Europe routes," says Albert Forestier, Sea-Land's director of communications. "Obviously, we needed a partner with global presence. And between ROLM's own expertise and that of its parents, IBM and Siemens, we've brought the whole world within reach."

The largest U.S.-flag intermodal transportation company in the business, Sea-Land handles customer service at more than 50 locations worldwide. To help field the calls, customer service repre-

sentatives are supported by a Voice Response Unit that responds to customers in any of five languages, thus eliminating the need to maintain multilingual staff.

The company also uses a ROLM PhoneMail[®] hub to speed information to thou-

sands of customers regarding their shipments' status, 24 hours a day.

Says ROLM account executive, Mike Buckley: "We've given Sea-Land a reliable, expandable, hands-off system that gets their customers directly to the information they need - no matter where they're located."

To learn more about our entire array of ROLMCenter solutions, call (800) 624-8999 ext. 235 (Voice access) or (203) 849-6833 (TDD access).

ROLM

**We ask better questions.
You get better answers.**

An IBM and Siemens Company

HANGING TOUGH IN A NATURAL-GAS GLUT

New tactics are letting some producers keep profits up

Jeffrey K. Skilling reached what he calls "commercial awareness" in 1960, at age 7. He saw three vacuum cleaners on sale at Sears, Roebuck & Co. labeled "good," "better," and "best." The price rose with each model, and Skilling recalls thinking: "If they put the lower price on the best one, I bet they'd sell a lot of those."

Skilling is now chairman of Enron Gas Services, the marketing arm of Houston pipeline giant Enron Corp., and he wishes people got the point today. Nearly everyone praises natural gas as abundant and clean and a way to narrow the trade deficit. And gas has been cheaper than oil for years. Still, gas demand is lower now than in 1980. Spot prices last winter hit a 16-year low of \$1.02 per thousand cubic feet (mcf). Supplies are falling up, thanks to better exploration technologies, and "the bubble," as the glut is called, is likely to last into the late 1990s.

FINCHED PIPE. To compensate, nearly everyone involved with the industry is taking aggressive action. Leading producers such as Atlantic Richfield and Amoco are shifting more drilling overseas, where exploration is cheaper and gas can fetch \$3 per mcf. This spring, Texas and Oklahoma changed the rules governing the amount of gas that may be produced at a given well or field so they can curb overproduction in the future. And some independents, such as Denver-based Apache Corp., have closed wells.

This last move, plus a cold snap this spring, has helped raise U.S. prices to about \$1.50 per mcf. If the past is a guide, though, that sudden improvement will soon boost drilling activity, deflating prices again. So Skilling and others are trying another approach to keeping their business on a sound footing: financial maneuvers that minimize risk and enhance profits even when prices are low.

One of the most popular of these involves a new look at long-term contracts, which run up to 20 years. Depending on the length of the deal, buyers pay a premium of as much as 25¢ over spot, for which they get a secure supply. The industry relied on such ar-

rangements in the 1970s and early 1980s, but back then, many pipeline companies agreed to pay too much. Ultimately, some buyers broke contracts or sued to alter them. Such companies as Columbia Gas Pipeline Co. eventually went into Chapter 11, and long-term deals fell out of favor. The newest ones have more escape clauses. Consumers Power Co., Michigan's largest utility, recently signed 10-year contracts with such major producers as Shell Canada Ltd. and Oxy USA that provide for price negotiations every three years. Both sides must agree, or the contract ends.

The deregulation of gas since the mid-1980s has speeded this process. Contract prices for gas can now be pegged to oil or coal prices, for instance. Houston's Coastal Corp., which produces all three fuels, offers to deliver the cheapest one to customers able to switch. For the foreseeable future, that means gas. Unregulated, independent power companies, which account for nearly half of new U.S. electric capacity, also tend to use gas. And many lenders won't back them without a long-term source of fuel. The bottom line: Benjamin Schlesinger, a gas consultant in Bethesda, Md., says more than half of today's gas is shipped under long-term contracts, up from 25% in 1988.

Enron, which both produces gas and

buys it from others, has put a new twist on this approach. It helps cash-poor independent producers by making early payments—\$121 million in 1991—for gas that won't be pumped for years. Since May, 1991, Zilkha Energy Co. of Houston has sold 23 billion cubic feet of such gas for \$32 million. Enron gets its share of that even if Zilkha goes bankrupt. It probably won't. Joseph J. Romano, Zilkha's chief financial officer, says the company is using the money for exploration to build its gas reserves.

NEW MATCHMAKERS. To supplement such direct transactions, the New York Mercantile Exchange opened natural-gas futures trading two years ago. NYMEX matches buyers and sellers for gas to be delivered up to 18 months distant, another way of avoiding the whims of the spot market. A year ago, for example, gas futures for last January hit \$2 per mcf. The spot market never got that high, but some lucky producers had locked in the price. This is an increasingly popular hedge. In 1992, NYMEX has averaged 3,719 contracts a day, more than twice the average in 1991. And similar offerings now exist apart from the futures exchange, with a gas marketer or some other middleman receiving a fee for matching buyers with sellers for deliveries at set dates.

New national energy laws may lead to streamlined licensing procedures for constructing natural-gas pipelines. This should boost both demand and prices later this decade—and reduce the pressure on producers to rely on financial maneuvers. "This business ought to be growing by leaps and bounds—and it will," says Enron's Skilling. It's just that companies today need to use all the tools at their disposal if they want to be around for the good times.

By Robert Buderer in Boston

SURVIVAL STRATEGIES IN NATURAL GAS

Producers are finding ways to compensate for low prices

LONG-TERM CONTRACTS

They now run up to 10 years. Prices are usually indexed, often to spot prices

GAS-DENOMINATED DEBT

Pipeline companies, such as Enron, are advancing millions against future deliveries. This helps producers that can't get conventional financing

MULTIPLE-FUEL CONTRACTS

Diversified producers, such as Coastal, will deliver whatever is cheapest—coal or natural gas, for instance—to customers that can use either one

FUTURES CONTRACTS

Trading in gas futures, which began in 1990, helps guard against wild price swings

COST-CUTTING

Most large companies now drill more overseas, where costs are lower and gas prices higher. Domestically, many producers extract gas from coal seams, which generates a special investment tax credit

DATA: BENJAMIN SCHLESINGER & ASSOCIATES INC., BW

WHERE U.S. NATURAL GAS IS BURNING BRIGHT

Despite plentiful supplies, Mexico is pumping in cheap imports

It's like carrying coals to Newcastle: All along the 2,000-mile Mexican border, U.S. companies are pumping natural gas to energy-rich Mexico—a new market for beleaguered American producers.

To clean up its air, Mexico is converting power plants and bus fleets to natural gas. It could use its own supplies, but why bother? U.S. gas is nearby and sells for a bargain \$1.70 per thousand cubic feet. By importing it, Mexico can concentrate investment on more lucrative petrochemicals and crude oil. "It's simple economics," says Francisco Casanova, a director at Mexico's state oil monopoly, Petroleos Mexicanos (Pemex).

Mexican imports have tripled in the past year and should again in the next 12 months, experts say. In March, Hous-



SMOG ALERT: CONVERSION MEANS CLEANER AIR

ton's Enron Corp. applied to the U.S. Federal Energy Regulatory Commission to build a pipeline to Reynosa in north-eastern Mexico. And El Paso Natural Gas Co. hopes to serve power plants and many of the 2,000-odd U.S. factories, called *maquiladoras*, that run from the

Chihuahua Desert to Baja California. By 1997, experts say, gas sales to Mexico could hit 3 billion cubic feet a day, about 5% of the U.S. market.

The move to gas may blunt environmentalists' contentions that Mexico is using the proposed North American Free Trade Agreement (NAFTA) to lure polluters from up north. Gas imports may also help relieve mounting pressure on Pemex. As its auto sales boom, Mexico's demand for local oil is growing by 5% a year. By converting utilities from oil to gas, Pemex protects its crude exports.

If NAFTA goes through, more U.S. producers should expand to Mexico. The richest prize is Baja California, which has nearly half the *maquiladoras*. Already, Bechtel Group and Coastal Corp., a Houston pipeline and gas-production company, have plans for a gas-fired electricity-generating and desalination plant near Tijuana.

Even without the trade pact, however, the trend is clear: U.S. producers are finding that Mexico's prickly insistence on energy self-sufficiency is bowing to dollars-and-cents pragmatism.

By Stephen Barker in Mexico City

TOMORROW'S BEST INVESTMENTS FROM THE McGRAW-HILL BOOKSTORE



All the Best Books from All the Best Publishers

Clip or copy this coupon and FAX or mail to:

McGraw-Hill Bookstore, 1221 Avenue of the Americas, New York, NY 10020
Fax: 212-512-4105; Tel. 1-800-352-3566; in New York City (212) 512-4100

YES Please rush me:

Check, money order, or credit card only:

☐ VISA ☐ AMEX ☐ MasterCard

Business Week's Guide to Mutual Funds
(ISBN 0-07-035857-5) • 192 pp • \$14.95

Managed Futures
(ISBN 1-55738-291-3) • 435 pp • \$65.00

Capital Markets
(ISBN 0-07-04064-4) • 211 pp • \$60.00

The All-Season Investor
(ISBN 0-07-04064-4) • 211 pp • \$29.95

State _____ Zip _____

Please add applicable sales tax, plus \$2.50 for U.S. postage

BWD 540

BUSINESS WEEK'S GUIDE TO MUTUAL FUNDS

Second Annual Edition

By Jeffrey Laderman, Associate Editor at Business Week

Backed by *Business Week*, this new edition of the investment world's favorite simplifies rating and comparing current yields, past performance, and risk factors on 1,400 top funds. Published by McGraw-Hill, Inc.

MANAGED FUTURES

Performance, Evaluation, and Analysis of Commodity Funds, Pools, and Accounts

Edited by Dr. Carl C. Peters

Get in on the ground floor of this hot new inflation-beating investment category with the first-ever complete guide to all aspects of performance, yields, and relative risk.

Published by Probus Publishing, Inc.

CAPITAL MARKETS

Institutions and Instruments

By Dr. Frank J. Fabozzi and Dr. Franco Modigliani

Two MIT professors, one a Nobel winner in economics, guide you through today's wide choice of financial instruments, covering everything from sources to costs and risks.

Published by Prentice Hall, Inc.

THE ALL-SEASON INVESTOR

By Martin J. Pring, bestselling investment author

Turn yourself into a sensitive business barometer and profit even in recessionary times with this guide to reading the financial climate and timing and placing investments for security and high yields.

Published by John Wiley & Sons, Inc.



THE McGRAW-HILL BOOKSTORE—SERVING TODAY'S PROFESSIONALS

SUPER TRUCKS

Consumers want vans and pickups that behave like cars. Commercial truckers demand vehicles that are tougher and more maintenance-free. And big-truck buyers need rigs that work harder than ever. Call them America's most popular "specialty" vehicle. They're trucks, and they aren't just for hauling cargo anymore.

OUTLOOK FOR THE 90s



HIT THE ROAD

Crack

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

EPA REGULATIONS

INSURANCE

ADMINISTRATION

LICENSING

PERMITTING



COLD

COLD

FUEL
Availability

FUEL
Costs

CAPITAL
CONSTRAINTS

OPERATING
COSTS

MAINTENANCE
COSTS

EQUIP-
MENT
INVESTMENT

DISSATISFIED
CUSTOMERS

MISSING
DELIVERIES

DOWN
TIME

STOP

STOP



SONET



If you imagine truck ownership as a pinball game in which every problem is a bumper, guess what? You're the ball.

So instead of getting bounced around between things like unstable fuel supplies, vehicle administration and maintenance, tougher EPA regulations and new truck technology, tilt the game in your favor with a Ryder Full Service Lease.

Ryder tilts the transportation game in your favor.

You'll get more than custom-specified vehicles, a preventive maintenance program that keeps them running in top condition, and substitute trucks when you need them. You'll get the competitive edge, because you'll have better control over getting your products into your customers' hands on time.

Call Ryder for a free "Lease Versus Own Analysis" at 1-800-952-9515, ext. 102. After all, your company's transportation is a game you can't afford to lose.

RYDER
1-800-952-9515

SUPER TRUCKS

OUTLOOK FOR THE 90s



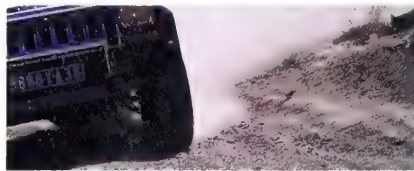
Ford's Explorer redefined the meaning of "sport utility vehicle" in America.

Today trucks account for a full one in three vehicles sold in the United States. By far their biggest impact is at the light-duty end of the trucking spectrum. That's where more and more consumers are opting for a pick-up, van, or sport utility vehicle instead of a car...and demanding greater car-like comforts in the bargain.

Equally big changes are happening further up the trucking scale, where trucks are used commercially. Here, the emphasis is on more performance, lower operating costs, and greater durability in everything from delivery vans and dump trucks to steel haulers and big highway rigs. The trend is reworking the classic distinctions

between "medium-" and "heavy-duty" trucks.

New safety, emissions, and fuel economy standards are reshaping the face of trucks as well. There is an amazing revolution sweeping across the truck market, and bringing with it enormous change from the smallest of pickups to the largest of highway haulers.



THE GROWTH IN "CIVILIAN" TRUCKS

By far the biggest portion of truck sales — some 95% — is at the light-duty end. That means pickups, vans, minivans, and sport utility vehicles with a combined vehicle and cargo weight of 14,000 pounds or less.

Until about 1980, some 75% of trucks were purchased for commercial use. The rest were for personal use. Today that ratio is reversed. It's not that business uses trucks less. It's that the "civilian" use of trucks is zooming as consumers discover they like the ruggedness and utility of a truck. In the late 1970s, only one vehicle in five sold was a truck. Now the ratio is one in three.

"The whole definition of a truck is changing," notes Clifford Vaughan, vice-president and group executive of General Motors Corp.'s Truck & Bus Group in Pontiac, Mich. Vaughan estimates light-duty trucks and vans have

picked up some 1 million in "cross-over" sales from the auto market in recent years.

The new breed of truck buyers has already blurred the once-obvious distinction between a truck and car. Truck manufacturers count 50 or more variations in today's light-duty truck market alone.

Why the proliferation? Some experts attribute it to the trend toward smaller and more fuel-efficient cars over the last 15 years or so. They figure modern cars satisfy America's demand for better fuel economy — but don't always deliver the passenger capacity and luggage room many consumers still want. Trucks, they conclude, offer a good compromise.

"We want to make sure our vehicles on the truck side have all the amenities of a car, without losing the utility of a truck," says Chester Kuziemko, truck marketing plans manager for Ford Motor Co.'s Ford Division.

Consumers are blurring the distinction between "car" and "truck" by using 75% of trucks for personal use — not commercial purposes.

IN THE BEGINNING

The idea of using a work truck for personal use is hardly new. Some historians say it all began in the 1920s when the "express truck" — forerunner of today's pickup — was invented.

Express trucks were derived from cars. They shared a car's front end and cab, with a bare frame in back upon which the buyer could mount a platform or box. The resulting vehicle was used primarily for city deliveries or as a replacement for a farm horse, according to a study by Keith Helfrich, truck marketing plans manager for Chrysler Corp.'s Dodge Division.

Most truck applications were commercial. The biggest differences in trucks revolved around wheelbase and cargo box size. Then, in the 1960s and 1970s, manufacturers began to look for new cab configurations.

One result was the "crew cab" from Dodge, a four-door pickup with room inside for six. About the same time, Ford tested the marketing waters with a "premium" cab option that offered such unheard of trucking amenities as carpet and air conditioning.

The recreational industry responded to these innovations in pickup truck design with an innovation of their own: the slide-in camper.

Another variation on the pickup truck was inspired by the growing practice of some pickup owners to put



Light-duty trucks, such as the Dodge Caravan, account for the greatest percentage of industry sales.

DODGE WILL BUILD

We build Dodge Ram Vans to suit businesses big and small. With a variety of wheelbases and cargo capacities, and prices starting as low as \$13,779.* And in every one of these hard-working trucks, you'll find certain built-in advantages. Like our new Magnum V-6 with 44% more

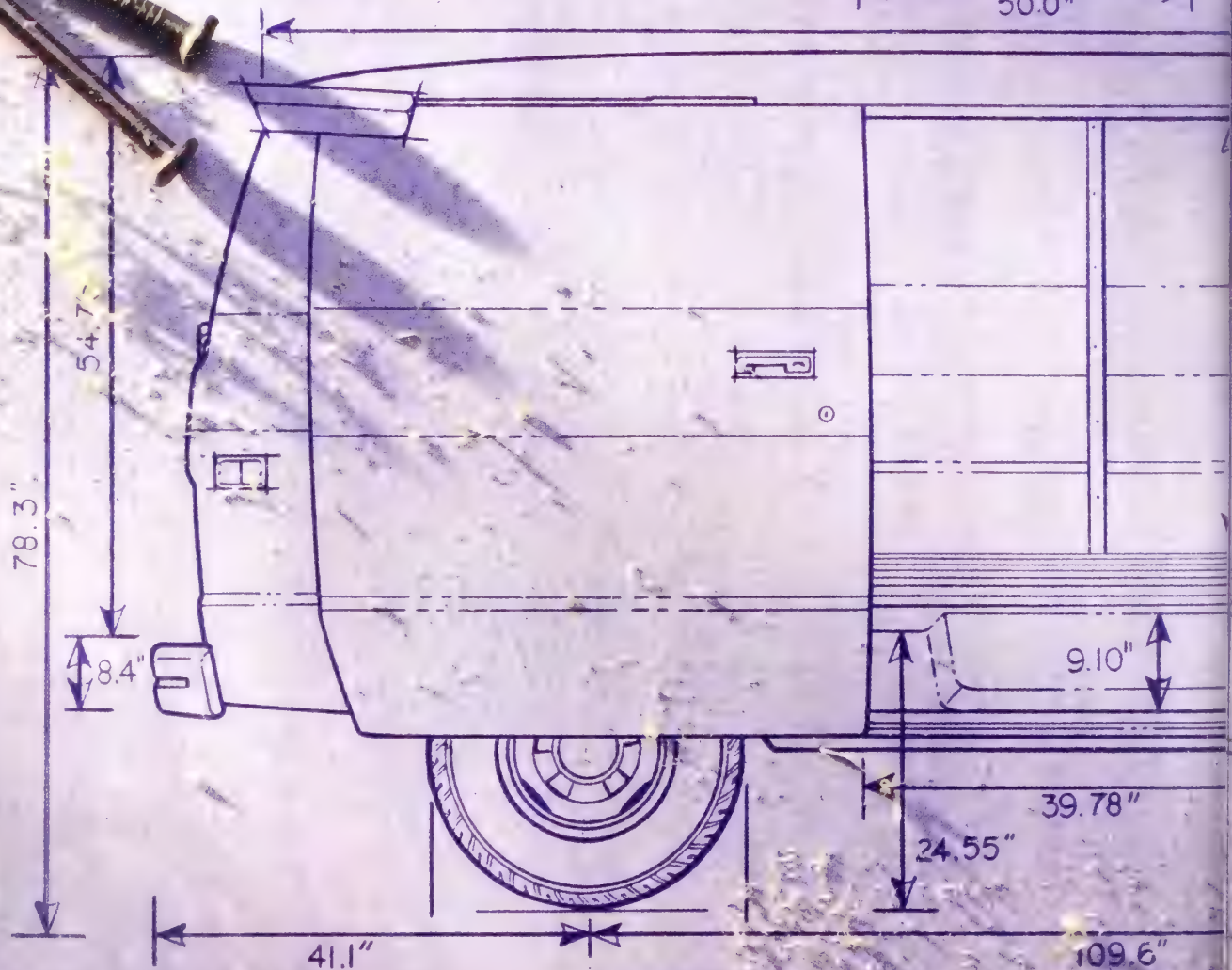
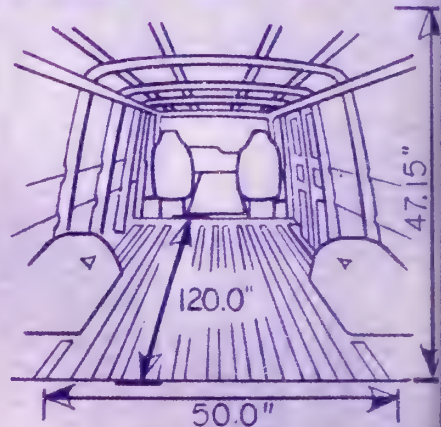


Figure 1

RAM VAN. DARE TO SUIT.

horsepower. Or the Magnum V-8 with 35% more horsepower. You also get the Owner's Choice Protection Plan – a warranty choice no other manufacturer offers.†

Plus, now we're building in one more advantage. In addition to the \$1,000 cash back incentive already offered on Dodge Ram Vans, you can get up to \$1,500 worth of

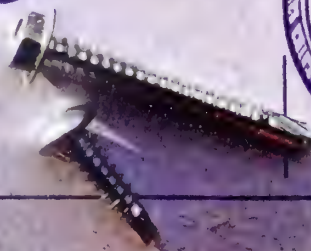
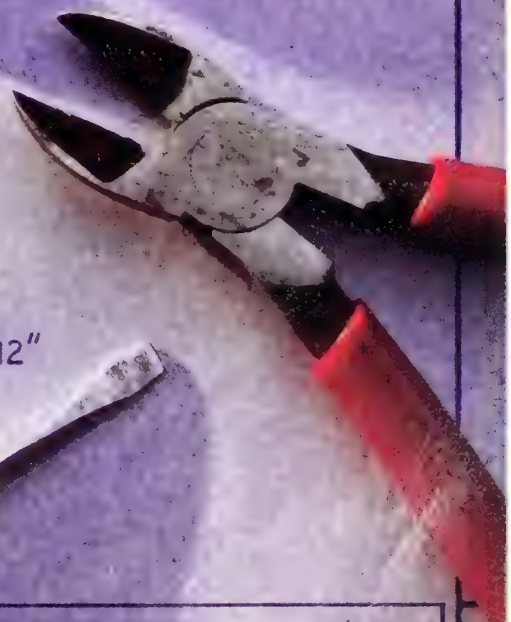
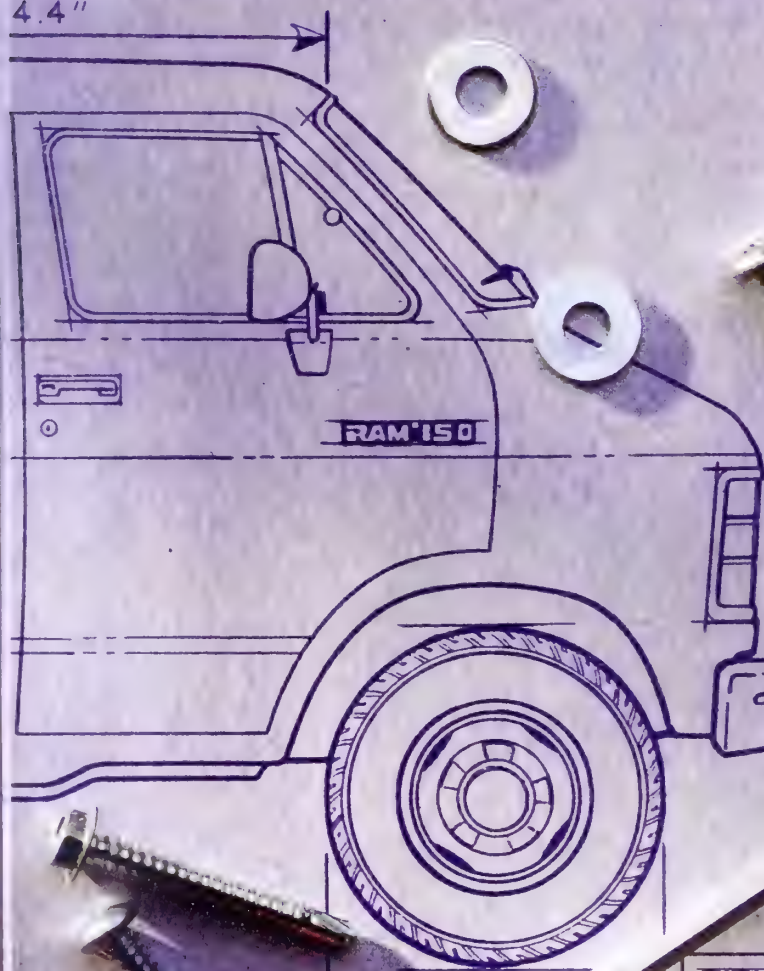
shelving, racks, storage bins and floor mats at no extra charge. Or choose an additional \$1,000 cash back instead.

**DARE TO COMPARE DODGE RAM VAN.
FOR MORE DETAILS AND YOUR INSTALLATION
PERMIT, CALL 1-800-2-RAM VAN.**



*Base MSRP for van shown excluding tax & dest. charge. Mirror illustrated. \$94 extra.†See limited warranties, restrictions & details at dealer. Excludes conversion alterations, normal maintenance, adjustments & wear items.

4.4"



TITLE: DODGE RAM VAN
VIEW: PROFILE

ADVANTAGE: DODGE



J.D. POWER AND ASSOCIATES®

"Best Overall Medium-Duty Truck"

♦ **MITSUBISHI FUSO**

Navistar/International

Hino

Isuzu

Nissan (UD)

Ford

*according to J.D. Power and Associates
1991 Medium Duty Truck Customer Satisfaction Survey

This Is What
Happens When
You Put Your
Customers
First.



Best
THE RIGHT TRUCK FOR THE JOB

Mitsubishi Fuso Truck of America, Inc. 1001 Garden State Road, Bridgewater, NJ 08807. 800-MITFUSO

SUPER TRUCKS

OUTLOOK FOR THE 90s

WHY BUY?

Bankrolling a fleet of commercial trucks is no minor expense. Not to mention the cost of fuel, maintenance, and driver training. For a growing share of businesses, the option is obvious: lease rather than buy.

For some companies, leasing is limited to the truck fleet itself. But others are taking the concept further. They're renting their entire product delivery system. "We tell companies they should focus on their primary business and let us worry about the transportation part," says Douglas Slack, senior vice-president of marketing for Ryder Truck Rental Inc. "And we're finding more companies doing just that."

Miami-based Ryder offers business a broad array of leasing options. Companies can lease trucks and use their own staffs to operate them, own their own fleet, and hire Ryder to handle everything else, or use Ryder to provide all transportation services on a turnkey basis.

Ryder even has a group to analyze a company's material logistics, from transportation and inventories to warehousing and information systems. "Business has fundamentally changed in this country," opines Slack. "It'll never be 'business as usual' again. Organizations are leaner. They're focusing on their customers and outsourcing their other needs."

"caps" over their cargo beds. Before long manufacturers took the next step by extending the cab roof itself to cover the load bed. The result was the sport utility vehicle, or SUV.

Yet another truck form was invented in the 1960s. Dodge plopped a boxy body on a pickup frame to create what would soon become the modern passenger van. But Dodge's mid-engine "A-van" was intended strictly for business as a delivery vehicle. Says Helfrich, "We had no idea people would suggest we put rows of seats in it."

Not every personal-use van buyer wanted seats, however. By the mid-60s van engines had moved forward to open up more room for cargo. Tens of thousands of young people were buying vans and turning them into rolling living rooms. Or, in many cases, bedrooms on wheels. So-called "street vans" with fancy paint jobs and multipurpose interiors were all the rage by the late 1960s and into the 1970s.

A sharp jump in fuel prices cooled the market for fullsize pickups and vans. It also spawned demand for Japan's compact-size pickups. Detroit responded with its own array of smaller pickups. And both groups of manufacturers soon added a whole new fleet of smaller sport utility vehicles built upon their compact pickup platform. Compact trucks now account for more than half of the total truck market.

Then Chrysler Corp. revolutionized the van market by marrying the practicality of a van with such automotive benefits as front-wheel-drive technology and carlike interiors. Its Plymouth Voyager and Dodge Caravan minivans, introduced in 1984, have been hits with families ever since.

WHAT IS A TRUCK ANYWAY?

In the past, a quick glance was all it took to tell the difference between a



Dodge Dakota LE CC 4x4 won **Four Wheeler** magazine's award as best four-wheel-drive pick-up for 1992.

Why The Experts At Making Innovative Containers Choose Chevrolet Lumina APV.



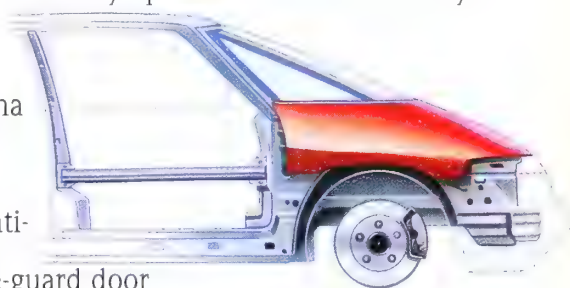
You Don't Get More Innovative Than This.

For over four decades, Tupperware, the leader in food-storage containers, has been bringing the American household innovative products and uncompromising quality.



With the amount of time Tupperware consultants spend on the road providing personalized service, it's not surprising that Tupperware demands quality and innovation from its vehicles. Or that Tupperware currently operates over 5000 Chevy Lumina APVs.

Every 1992 Lumina APV comes with standard 4-wheel anti-lock brakes and side-guard door



beams for passenger safety. Lumina's composite outer-body panels are ding resistant and will never rust.

Lumina's optional load-leveling suspension provides car-like drivability and a level ride under varying load conditions. And with its 112.6 cubic feet of cargo capacity and optional, removable modular seats, Chevrolet Lumina APV is truly an All Purpose Vehicle.

Chevrolet protects you with a 3-year/36,000-mile Bumper to Bumper Plus Warranty, with no deductible.* For more

information, contact our Fleet Sales office at 1-800-248-2897. You'll find, at Chevrolet, quality and innovation really stack up.



* See your dealer for a copy of this limited warranty. Tupperware is a registered trademark of Tupperware. Chevrolet, the Chevrolet emblem and Lumina are registered trademarks and Chevy is a trademark of the GM Corp. ©1992 GM Corp. All Rights Reserved. Buckle up, America!



The Heartbeat Of America Is Winning.™
TODAY'S FLEET COMPANY IS CHEVROLET.

SUPER TRUCKS

OUTLOOK FOR THE 90s



Chevrolet's four-door S-10 Blazer was first with fulltime four-wheel antilock brakes.

car and a truck. It's just as easy now to tell a car and a pickup truck apart. But the distinctions aren't so clear for newer members of the light-duty truck family.

Most consumers probably don't care, as long as the vehicle they buy delivers the utility they want. But to manufacturers, the difference between "car" and "truck" is profoundly important. It's not just a matter of how a vehicle is marketed. It's a question of meeting very different federal requirements for fuel economy, safety, and exhaust emissions.

Call a vehicle a car, and its manufacturer must average it in with other products to achieve a corporate average fuel economy (CAFE) of 27.5 miles per gallon. If the vehicle is deemed a truck instead, its fuel economy bogie is just over 20 mpg. Likewise, light-duty trucks have higher emission allowances than do cars.

Fuel economy and pollution stand-

ards have been different for trucks than cars for good reason.

Making a truck lighter and less powerful would help boost economy and cut pollution. But it would also rob the vehicle of its intended utility. It would, that is, unless the truck is really being used as a car. When a vehicle is being used in both roles, however, which standards should apply?

Federal regulatory agencies have been grappling with such questions for years. Each has come up with its own definitions of car and truck. Many have a third category — multipurpose vehicle, or MPV — to cover certain trucks that are used as cars.

Usually it's up to the manufacturer to choose which category it wants a vehicle assigned to. Unfortunately, federal definitions aren't mutually exclusive. In fact, they aren't even uniform from one agency to another. To further complicate things, states often set their own vehicle definitions. So the same

Truck makers and their customers have helped each other refine truck design for 70 years and invented everything from crew cabs to minivans in the process.

vehicle can end up with a bevy of classifications.

Maybe it's confusing to figure out how to label a truck. But manufacturers say there's no mystery about where to begin designing one.

"Most of the great trucks on the street today were designed for commercial use," explains Lewis Campbell, general manager of GM's GMC Truck Division. "You can't get a car-based truck to do heavy-duty truck work, so you have to start from the opposite end. The 1990s will be a major test of our engineers' ability to design a work truck, and add carlike features for non-work buyers."

WHAT'S NEW

In the past, innovations in trucks came slowly. No more. Mushrooming consumer demand for trucks and vans that perform carlike functions means



With the right strategy, you can enlarge your fleet without increasing your units. The next time you replace vehicles, put a few GMC Truck Jimmys and Safaris in your fleet. There's a big difference right away. For one thing, more drivers are at home in personal trucks like our

WHY YOUR FLEET SHOULD BE LARGER.

Jimmy 4x4s and 2-wheel drives and Safari vans. These vehicles combine a worldly practicality with a spirit of fun and adventure – and round it out with luxury and comfort that might surprise you. Many of your drivers will jump at the chance to drive the types of vehicles their families have chosen.

Then there are big advantages that Jimmy and Safari offer your drivers in their work. With more room than just about anything you've ever seen in a fleet vehicle, they'll drive off with more of the business every day: more samples, equipment, displays or even more clients if need be. Safari can seat up to eight comfortably.

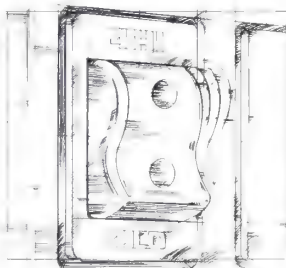
They'll also be able to get places where cars tread dubiously, if at all. Jimmy 4x4 features InstaTrac 4-wheel drive – a flick of the wrist (or, with available Electric Shift Transfer Case, a flick of a switch) and off-

road capabilities shift right in. Safari is available with full-time all-wheel drive, too. Both vehicles make added safety a point of principle, with four-wheel antilock braking standard.

And when it comes to choosing fleet vehicles that hold their value, experience is on your side: GMC Trucks have consistently held their value and had the highest average resale in their classes for 12 years running.* They're values to your drivers – and to drivers in the resale market. Call 1-800-879-4621 for catalogs.

So next time you replace, show your drivers a couple of big ideas that are good for business: Jimmy and Safari, from GMC Truck.

Based on the weighted average of the MSRP of 3-, 4- and 5-year-old comparably-equipped vehicles as compared to the auction prices as reported in the 1980-1991 January issues of the *National Automotive Research Black Book*.



FLICK-OF-A-SWITCH 4WD – AVAILABLE
ELECTRIC SHIFT TRANSFER CASE



SAFETY FIRST – FOUR-WHEEL ANTILOCK
BRAKES ARE STANDARD



THE STRENGTH OF EXPERIENCE

SUPER TRUCKS

OUTLOOK FOR THE 90s

a sharp jump in the pace of change. Here's what's new.

Sport Utility Vehicles

The next generation of go-anywhere SUVs debuted in 1990 when Ford introduced its trend-setting Explorer. Explorer has become a runaway best-seller in the sport utility vehicle market with an overall package that analysts say combines the best of truck and car features.

The competition heated up this spring when Chrysler unveiled its new Jeep Grand Cherokee. Unlike most SUVs and pickups whose bodies ride atop a separate frame, Grand Cherokee has the same unitized body construction typical of today's cars. Chrysler says one result is 20% greater body stiffness for a better ride than Explorer. Chrysler also boasts its new model's safety features — thanks to four-wheel anti-lock brakes (ABS) and a driver's air bag.

GM led the industry last year with all-wheel ABS for its compact four-door S-10 Blazer and GMC Jimmy SUVs. For 1992, the system comes standard on two-door versions of the vehicles as well. GM has also added a higher-output version of the 4.3-liter V6 used in its compact SUVs and mini-vans.

Vans

Vans are big news at Ford this year. At the fullsize end, the company debuts a reengineered Econoline Van and Club Wagon. Ford calls the vans the industry's first all-new, fullsize vehicles of their kind in 17 years. The models bear the unmistakable lines of their predecessors, but feature rounded and more aerodynamic noses.



Chrysler Corp. rolled out the first offroad vehicle equipped with an air bag, its Jeep Grand Cherokee also comes with anti-lock brakes.

Ford also introduces its first front-drive minivan, the Mercury Villager, this spring. The upscale vehicle was designed and engineered by Japan's Nissan Motor Corp. and is being built by Ford in a plant in Avon Lake, Ohio. The same factory is building a twin to the Villager that will be sold by Nissan dealers as the Nissan Quest.

GM introduced "dutch doors" on its midsize Chevrolet Astro and GMC Safari vans this year. But most of its van refinements in 1992 are under the hood. The company makes a more powerful, 165 hp. V6 engine and four-speed automatic optional in its trio of futuristic vans, the Lumina APV, Pontiac Tran Sport, and Oldsmobile Silhouette.

Pickup Trucks

The biggest news in pickups this year is Toyota's announcement that it will enter the midsize pickup truck market

— a domain formerly controlled exclusively by Detroit manufacturers. Industry reports say Ford is developing its own midsize pickup to compete against Toyota. Chrysler's Dakota pickup is the only midsize truck now on the market.

GM has focused most of its truck attention in 1992 on fullsize models with its biggest vehicle overhaul in years. The new Chevy fullsize Blazer and its GMC Yukon twin feature fresh sheetmetal, a longer wheelbase, more power, a new turbocharged diesel engine, all-wheel ABS, and a host of interior refinements.

GM has also revamped its venerable Suburban, America's only truck-based, fullsize station wagon configuration. The more aerodynamic Suburban rides on a longer wheelbase and features such refinements as independent front suspension and all-wheel ABS.

At Dodge, the news is in the engine



bay. Two of the division's most widely-used powerplants, its 3.9-liter V6 and 5.2-liter V8, have been extensively reengineered in 1992 for considerably more power, higher fuel economy and greater durability. The new V8 helped Dodge's Dakota Club Cab 4x4 model win **Four Wheeler** magazine's award as best four-wheel-drive pickup for 1992.

Specialty Trucks

If there were any doubts that trucks aren't what they used to be, GMC Truck has erased them with a pair of the most exotic, hotrod trucks ever offered by a conventional manufacturer.

The GMC Syclone is a Sonoma compact pickup equipped with a turbo-charged and intercooled V6 engine that generates 280 horsepower and 350 lb-ft of torque. The powerplant can propel the little pickup from zero to 60 mph in less than 5 seconds — making it quicker than a Ferrari in the 0-60 dash. The low-slung pickup comes equipped with

special aerodynamic body moldings, all-wheel drive, ABS and sports-car-like suspension.

GMC Truck applied the same philosophy and drivetrain to its Jimmy to create the Typhoon, easily the world's fastest sport utility vehicle. It sprints from rest to 60 mph in about 6 seconds, yet can corner with a world-class lateral acceleration of 0.82 g's. Inside, the truck comes with leather seats, stereo with graphic equalizer, and optional compact disc player.

THE COMMERCIAL SIDE OF TRUCKS

Much of the glitz and glamour of trucks is in the light-duty end of the market. But the heavier trucks used for commercial business are considerably more important to the American way of life. The makers of big trucks like to point out that virtually everything consumers see, touch, smell, walk on, or look at

on a daily basis — except for such things as air and water — got there by truck.

Most of those trucks are medium- or heavy-duty models. The truck industry divides its products into eight categories according to gross vehicle weight. Light-duty covers classes 1 through 3 — trucks with combined vehicle and maximum load (gross vehicle weight, or GVW) of no more than 7 tons.

Move into the heavier classes and the complexion of the truck business shifts dramatically. For one thing, sales volume is sharply lower. Classes 4 through 7, covering trucks in the 14,000 to 33,000-pound GVW range, represent a combined market of just 100,000 units annually. Sales are spread over some 16 brands, half of them imports.

Foreign makes compete in the medium segment, where they control about 20% of sales. One of them, MITSUBISHI FUSO Truck of America, Inc., was top-rated this year by J.D. Power & Associates, the California-based market researcher whose quality indexes are more familiar among auto makers. MITSUBISHI FUSO swept Classes 5, 6, and 7 and was rated best overall.

Class 8 trucks, the biggest machines on the road, constitute the heavy-duty end of the market. These all-American behemoths weigh in at more than 16.5 tons fully loaded. Here's where a single rig may cost \$110,000 or more — minus the trailer.

A Sales Turnaround?

Demand for commercial trucks was hardly robust last year. Indeed, demand nosedived to an eight-year low last year in this chronically cyclical market. Sales dropped 21% between 1990 and 1991 alone.



GMC Truck's Typhoon sprints to 60 mph in 6 seconds.

You want to go where no one has gone before.



This weekend.

If you want to go farther than all the others, consider the vehicle that did just that.

Explorer passed all the rest to become the best seller, the new standard.

Nothing in its class has so much overall room. And, Explorer lets you go from 2WD to 4WD High and back, on the fly, at the push of a button. The 4.0L EFI V-6 and rear anti-lock brakes are standard.



Available amenities like 6-way power seats, leather seating surfaces and a tilt-up open-air roof turn an Explorer into a very personal statement.

And now, Ford offers a 36-month/36,000-mile Bumper-to-Bumper warranty with no deductible.*

Explorer has all it takes to take you where no one's gone before.



Have you driven a Ford...lately?



Your Explorer is ready.

Buckle up—together we can save lives.

*Ask your dealer for a copy of this limited warranty

SUPER TRUCKS

OUTLOOK FOR THE 90s

Big swings in sales have always been a hallmark of the commercial truck market. And this spring, dealers say sales may be swinging back again.

"There's a lot of pent-up demand," suggests James Westlake, director of the American Truck Dealers (ATD). "Little by little, it's loosening up."

Westlake, whose group represents commercial truck retailers exclusively, cautiously predicts a 4% improvement in sales this year, to 231,000 units. ATD predicts Class 8 sales will account for 45% of the total.

Commercial trucks tend to follow the same purchasing cycle as capital goods. So an upturn in the medium- and heavy-duty end of the truck market is considered by economists another leading sign that general economic recovery is on the way.

Reliability and Cost

The commercial truck business marches to a different beat than does the light-duty truck market. In large part, that's because many factors that drive the light-duty market — style, comfort and a carlike ride, to name a few — are irrelevant in the medium-duty market. Here, buyers want reliability and low overall cost of ownership. The reason is simple: A commercial truck's performance is critical to its owner's livelihood. Downtime and poor resale kill sales, so manufacturers strive for products that don't break down and are quick to fix them when they do.

Such features have always been treasured among commercial truck buyers. But the recession has made low-cost performance especially important. Not that driver comfort



Mitsubishi's medium-duty trucks perform a broad range of jobs, many of them as delivery vehicle.

and safety are ignored.

"They're not going crazy," says Tom Pfingst, Chevrolet's assistant director of fleet sales, trucks, and special vehicles, "but fleets are becoming more cognizant of their drivers."

Nowhere is that more apparent than at Yellow Freight System, Inc. in Overland Park, Kan. It regularly surveys its own drivers for advice on how to improve everything from truck brakes to windshield washers. Drivers use a special 800 number to call the company's "Yellow Line Radio," a 50-minute music and message program put onto audio cassettes for on-the-road listening. Yellow Freight even taps some drivers to accompany management for plant visits to truck manufacturers. Says Bob Dro, vice-president of equipment and purchasing, "By working together, we get equipment that is safe, efficient, and consistent with what our drivers tell us they need."

MORE CHANGES AHEAD

To legions of consumers who demand the most possible utility for their vehicle dollar, the distinction between "car" and "truck" has become meaningless. Truck manufacturers can see the trend and are engineering a whole new wave of vehicles that promise to blur the difference more.

At the commercial end of the business, trucks continue their search for more efficiency, durability, and low-cost operation. As businesses strive for leaner operations, that trend will continue.

As usual, truck buyers — whether they're suburban families or freight haulers — will benefit from the industry's quest for super trucks.

William Hampton is a Detroit-based freelance writer with more than 20 years of experience covering the truck business.

Developments to Watch

EDITED BY FLEUR TEMPLETON

FROM JET ENGINES, THE SOUNDS OF SILENCE



The jet engine roar near airports is so loud that some communities have put strict limits on aircraft noise. The issue may soon be moot, however: Virginia Tech researchers are silencing jet engines by generating noise of their own.

Using sound against sound is not new. Anti-noise systems in car mufflers, for example, cut out unwanted racket

by generating sound waves of the same frequency and amplitude—but in opposite phase. Still, the Virginia Tech team is the first to quiet jet engines with the technique—cutting noise dramatically by up to 15 decibels. Using sensors, the system tracks engine rotation, which controls noise characteristics. A computer then generates a countersignal that is broadcast through acoustic devices inside the engine's air inlet.

Researchers are now trying to increase the frequency range to cancel out more noise. Several jet engine makers are interested in the work, funded by NASA's Langley Research Center, but commercialization is still a few years away.

WILL U.S. BIOTECH MUTATE INTO ANOTHER LOST MARKET?

Amid the gloom over declining U.S. competitiveness in everything from autos to electronics, biotechnology stands out as a strength. But even this is fodder for Cassandras. "Unless concrete steps are taken by government, industry, and universities," warns a new report from the prestigious National Academy of Sciences, the "U.S. biotechnology industry will lose its strong leadership position."

In particular, the authors are worried about an increasing one-way technology flow from the U.S. to Japan. In nearly 300 cases of links between companies of the two countries, for example, they found that more than 90% involve a transfer to Japan. In addition, Japanese companies are funding millions of dollars of research in academia. And thousands of Japanese scientists participate in cutting-edge research at U.S. universities, then take the knowledge home.

The report concludes that U.S. companies, universities, and the government must develop strategies "to increase inflows of technology from Japan and to expand marketing and sales in Japan." Examples include tapping Japan's strength in biotech manufacturing and better monitoring of advances there.

WINE'S FINE, BUT GRAPE JUICE WON'T GIVE YOU A HANGOVER

When scientists reported last year that drinking a glass of vino nightly can reduce cholesterol levels, tipplers sipped with new abandon. Now, researchers at Cornell University in Ithaca, N.Y., say grape juice is a teetotaler's alternative for lowering cholesterol and the risk of heart disease.

Leroy L. Creasy, a Cornell plant scientist, began testing

grape juice after he identified the compound in red wine believed responsible for reducing cholesterol. Called resveratrol, it's an antifungal agent found in grape skins and released during fermentation. White wines contain little or no resveratrol because the skins are removed before fermentation.

Although grape juice is not fermented, Creasy found that grapes release resveratrol as they're heated in juice production. Analyzing 18 juice samples from three parts of the country, he found that juice contained more resveratrol than 60% of the wines tested. The next step will be to look for resveratrol in other grape products, such as jellies, jams, and raisins.

AN EASIER WAY TO ZAP CIRCUIT BOARD BUGS

Manufacturers incessantly prod designers to get products to market faster. So startup Aptix Corp. has unveiled a high-tech method for a relatively low-tech but time-consuming chore: developing printed-circuit boards.

Circuit boards provide the network for chips to send signals back and forth. Today, the boards usually are created first as computer simulations, then turned into a prototype for testing. Typically, a bug will be found, because the simulation software doesn't spot all the defects in highly complex boards. Companies then revamp the design and make another prototype. Often they repeat this several times, with each rerun adding days to the process. Such delays can be especially galling when products contain multiple circuit boards.

Aptix' solution is to move the prototyping to the designer's desk—via a "switchboard" that functions like a telephone exchange. Called FPIC, for field-programmable interconnect, the switchboard's grid can be programmed to route each wire from every chip to its particular destination. Should a bug—a faulty connection—be detected, it can be fixed on the spot just by reprogramming the FPIC, using a special \$15,000 tool from the San Jose (Calif.) startup.

THIS SYSTEM IS LITERALLY GARBAGE IN, GARBAGE OUT

With landfills overflowing and recycling programs faltering, waste disposal is a major concern—and expense—for businesses and communities. An Ohio company has one solution: an on-line market for businesses to buy and sell wastes.

Developed by Cincinnati Bell Directory (CBD) Co., a subsidiary of the telephone company, along with consultancies WasteNet and Environomics Inc., the waste exchange costs \$395 a year to join. Once on the system, companies advertise reusable or recyclable wastes, from packaging to petroleum products, while others request materials. Participants communicate directly on the system.

Other waste exchanges exist around the country, but this is the first computerized system that's interactive and designed to serve a local business community. That keeps transportation costs to a minimum, says CBD Vice-President Jack Mueller. If the Cincinnati system proves successful, the company will introduce it into other local markets, says Mueller.



Our motto.

DAILY
MIRROR
TUESDAY
JANUARY
4
1949

MEANS

For every business
there is an IBM
product or

After all these years, we

Before we were known for computers or Nobel prizes or a blue logo, IBM stood for service. And we still do.

But today the need for service is different. Information technology has become so essential (and so complex), many companies feel it has taken them over. They're looking for someone to lighten the load so they can focus on what matters most, running the business.

So we've refocused, too.

IBM service is now a vast array of services, delivered by experts. Our help can range from broad

SERVICES

s, large or small,
nal Business Machines
ice to help meet the

made one small change.

strategic planning, to systems integration, to network management and user training.

We can also provide total hardware, software and network availability services, not only by fixing problems, but by anticipating them before they occur.

If you're streamlining data centers, we won't give you a hand, we can take them off your hands. Our ISSC subsidiary (which specializes in outsourcing and business recovery) is now managing several customers' data centers, lock, stock and barrel.

Or, if you're cutting costs selectively, we can handle many functions for you more cheaply than you

can do them in-house, saving you headaches, too.

But it's not just what you save, it's what you gain. And that's why IBM services exist—to keep your systems (and the people who use them) at their best all the time. Technology may be your most critical investment, and we'll help you make the most of it.

No one else has IBM's kind of depth or IBM's kind of people, which makes us an ideal services choice. To learn more about how we can help you, call for our detailed services brochure. The number is 1 800 IBM-6676, ext. 760.

The IBM logo, consisting of the letters "IBM" in a stylized, blue, sans-serif font.

HERE COMES THE THINKING CAR

Autos that chart routes and spot hazards may be around the corner

It's 6:30 a.m. in a strange city, there's a downpour outside, and you face a long trip. You flip on your hotel TV, type your destination onto a keypad, and up comes an electronic map. In your car, you get the same map on the dashboard screen, and a voice directs you to the freeway. During the next hour, your on-board computer regularly updates your location on the display. The car's collision avoidance system warns that you're following the next vehicle too closely. And once you're off the highway, the voice guides you to your local stop.

It isn't *The Jetsons* or a world's fair, but it may be the U.S. circa 2000. To be sure, there are daunting obstacles to overcome. Still, using technology gleaned from air-traffic-control towers and smart-bomb guidance systems, engineers already are testing these and other ways to improve safety and cut traffic snarls without building new roads.

Enticed by some \$659 million Washington plans to spend over the next six years on smart highway technologies, Lockheed Corp. has just joined with American Telephone & Telegraph Co. to create new traffic-management systems.

Dozens of others, including GM's Hughes Aircraft unit, Westinghouse, and TRW, want to supply everything from digital maps to collision-avoidance radars. GM, Ford, Chrysler, and Motorola plan to bid on a five-year, federally sponsored automated-highway test project that could cost millions more. Eventually, any widespread effort to adopt all this "would be bigger than the interstate highway program," enthuses William A. Spreitzer, who heads smart-highway research at General Motors Corp.

FAST LANE. Indeed, this grand scheme envisions a new infrastructure of sensors, TV cameras, radars, and other gear that will monitor city traffic and relay what's happening to central computers. From workstations at command headquarters, technicians will alter freeway signals and stoplights to reroute traffic. They'll also relay advisories to cars equipped with sophisticated navigation systems. The technology may even help organize high-speed trains of cars, giving life in the fast lane a new cachet.

To create such systems countrywide will cost billions, and that isn't the only hurdle. Consumers may balk at electron-

ic-toll schemes and other systems that, as a byproduct, track everyone's movements. "You need to build privacy into the system with the same protections that now exist for telephone communication," says University of Michigan law professor Kent R. Syverud. It's also unclear whether smart systems could handle millions of cars. "If you instruct 100,000 cars to exit at Brookhurst, that could be a problem," says Joseph Capobianco, a group vice president who heads diversification efforts at Hughes.

Still, the infusion of public money is about to get the idea rolling. This fiscal year, the Federal Highway Administration is spending \$234 million to develop so-called Intelligent Vehicle/Highway Systems (IVHS). That's up from \$20 million in 1991. "What's been lacking is an impetus from the government," says John Vostrez, a director at IVHS America, a Washington-based trade group. "Now, that's falling into place."

Within a few weeks, California expects to adopt technical standards for electronic systems for seven new toll roads. That could open the market for a new system from Lockheed and AT&T. As a car speeds under a scanner, the system would debit the toll from the driver's account. California is also testing trains of four cars on a freeway north of San Diego. Engineers foresee clusters of up to 25 cars, equipped with computers that control braking and steering. The technology is within "striking distance," says Hughes's Capobianco, though the threat of liability suits ultimately could quash the idea.

Work on a national system will start

RICHMOND, CALIF.

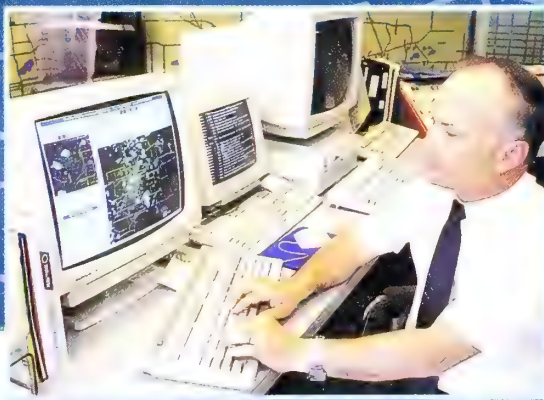
University of California researchers are spending \$6 million to develop electrified roadbeds and high-occupancy travel lanes that would

LOS ANGELES

Los Angeles and the state of California are testing a \$48 million system that links traffic lights and freeway sensors. When the freeway clogs, the traffic center diverts cars to side roads

HIGH-TECH HIGHWAYS

Will smart cars and intelligent highways ease traffic snarls? Here's a sampling of experiments designed to find out:



ORLANDO A test of 75 smart cars is under way

CHICAGO

A test of 5,000 smart cars in a 300-square-mile suburban area will begin in 1993. The \$35 million test will showcase a Motorola satellite navigational system

NEW YORK

This \$30 million experiment uses sensors embedded in a 35-mile stretch of highway on Long Island to transmit reports on traffic snafus to approaching cars

DATA BW

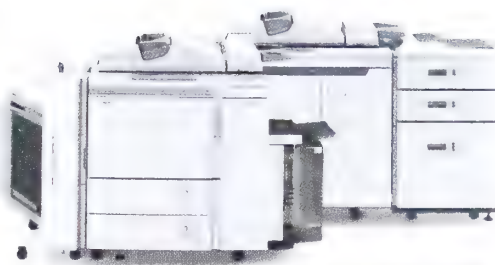


“If our copiers are working,
our people are working.”

The performance of your high-volume copying systems is vital to the productivity of your organization.

That's why we're proud to offer The Corporate Line of highly productive high-volume copying systems—copiers uniquely created for the demands of companies like yours.

The Corporate Line, featuring the NP 9800 and our new NP 6060, was designed for durability day in and day out. These copiers take productivity beyond delivering more



THE CORPORATE LINE

copies per minute. With fast first copy speeds so your people spend less time completing short runs. Sophisticated document handling and finishing capabilities for complete stapled sets at the touch of a button. And innovations like the largest paper capacities in the industry so your people spend less time

at the copier, and more time working.

The Corporate Line, from Canon. For ten years, America's #1 copier company. And now the new power in high-volume copying. Call 1-800-OK-CANON.

Canon



OPEN IN CASE YOU WANT
QUALITY CARE AND COST CONTROL
FROM ONE OF AMERICA'S LARGEST
HEALTH CARE NETWORKS.

The Travelers' commitment to quality products and cost control starts with 33,000 employees dedicated to customer satisfaction.

Of these, 10,000 work exclusively in our Managed Care and Employee Benefits Operation.

That's the real Travelers difference.

But the numbers get even more impressive.

100,000 carefully selected and credentialed physicians and other health professionals and 1,000 hospitals in 130 major metropolitan areas.

\$1.4 billion in new business in 1991 — testimony to a company whose health care network delivers appropriate care more efficiently through local medical management. A company that customizes programs because it understands that not all businesses are the same. A company committed to avoiding illness — and expense — through wellness and counseling programs.

Two more numbers to be remembered. The Travelers is backed by over \$50 billion in assets and by a 128 year tradition of service.

This is Managed Care The Travelers Way.

TheTravelers
You're better off under the Umbrella.®

© 1992
The Travelers Insurance Company
and its Affiliates, Hartford, CT 06183.

later this year, when the Transportation Dept. awards up to \$20 million in contracts to design the technical foundation. Hughes, for instance, is pushing a radio communications technique—called spread-spectrum radio—now used for military communications. And Rockwell International Corp., Hughes, and others are developing systems using the same microprocessors and image-processing software that direct smart bombs to their targets. Under these schemes, an accident would alert traffic controllers, who would scope out the damage via TV cameras and redirect drivers.

BUS BUZZERS. Even before large systems take shape, Greyhound Lines Inc. expects to outfit its buses with collision-avoidance radar from VORAD Safety Systems Inc., a small San Diego company. When another vehicle gets too close, a warning light and buzzer alert the driver. Within the next two years, auto makers expect to introduce intelligent cruise controls that adjust a car's speed to the

one ahead. Myriad other products are on the drawing board, too. Etak Inc., a Menlo Park (Calif.) company that makes digital maps for navigation systems, is compiling electronic yellow pages for car computers. In Japan, Pioneer Electronic Corp. has just unveiled a system with a built-in CD player that includes video entertainment, quizzes, and *karaoke*. "The value-added market is undreamed of at this time," says Donald E. Orne, director of California's Partners for Advanced Transit & Highways, a research consortium in Richmond, Calif.

For now, American companies trail foreign producers. Some 400,000 cars in Japan already have navigation systems. A consortium led by electronics manufacturers Siemens and Robert Bosch plans to expand a small network of radio transmitters to encompass Berlin's main streets and highways. These will beam road conditions and instructions from a traffic center, plus receive data on the location of cars to provide an overall

traffic picture. In London, meanwhile, drivers can pay \$33 a month for a service that displays traffic snarls within a 30-mile radius on a small electronic map. This system may be bound for the U.S. through a joint venture between Westinghouse Electric Corp. and General Logistics PLC., which developed London's Trafficmaster system.

U.S. producers are driving to catch up. This summer, GM and Motorola will start equipping 5,000 cars with satellite-based navigation gear for a \$35 million test program, called Advance, near Chicago. "There's nothing as ambitious as Advance in Europe," says Ian Catling, who is coordinating a European Community auto-navigation project called SOC-RATES. Talk about manifest destiny. The U.S. has the most cars in the world, the most paved roads, and one day it may have the smartest highways, too.

By Eric Schine in Los Angeles, with Mark Maremont in London, Christina Del Valle in Washington, and bureau reports

ON THE ROAD IN ORLANDO: MY WILD RIDE WITH SVEN

Except for the special antenna poking out near the trunk, the white 1992 Oldsmobile Toronado waiting at Orlando International Airport looked like an ordinary car. But on the dashboard was a computer screen. It was my link to TravTek, a system that guides drivers to any business or residential address in a 1,200-square-mile area of central Florida. After a 15-minute demonstration from an Avis representative, I was off for an eight-hour, 200-mile spin that was both dazzling and disappointing.

Avis Inc. has placed 75 cars in a \$12 million, yearlong test. The sponsors include GM, the Federal Highway Administration, the Automobile Association of America, the Florida Transportation Dept., and the city of Orlando, which was chosen because it's the No. 1 U.S. tourist destination.

Say you know the name of your hotel—but that's all. Press a button labeled "Navig" near the screen. Up comes a four-item menu: Services/Attractions, Map of Local Area, Emergency, and Instructions. Pressing the arrow for "Services/Attractions" yields that category's directory, mainly from Orlando's yellow pages. Enter your destination, and in one minute TravTek plots a course. A purple line shows the start of the route, and a white arrow gives your location. The map changes as the car moves. Or you

can get written directions. The system relies on several technologies, including NASA's string of global positioning satellites, sensors placed at 400 intersections throughout central Florida, computers, and video cameras.

FLEA WORLD. I didn't bother with Walt Disney World or Sea World, two well-known spots. I went for Flea World, the self-proclaimed world's largest outdoor flea market, 35 miles north of the airport. As I drove, a computerized

turn. Then he said: "Destination ahead in 9 miles." Wrong again: In 6.8 miles, I passed Flea World. Sven halted me at the parking lot of an auto parts store 2.2 miles further on. "Route guidance complete," he said. "You are within the vicinity of your destination."

From the car, I called the AAA's 24-hour TravTek Help Desk. I was told there might be a mistake in the computer's data base. Before heading off again, I corrected the car's location by entering into the computer the address of the auto parts store.

This time, I aimed for a Thai/Vietnamese restaurant in the suburb of Winter Park. This 16-mile trip was nearly flawless. TravTek gave me plenty of notice of turns and correctly told me: "Traffic is moderately congested on Interstate 4 East." Next, I picked a residential address from the phone book. It was 35 miles

away. Perfect again. I drove through strange neighborhoods at night as if I had been there a thousand times.

For one last test, I tried the Elvis Presley Museum. It's on U.S. Highway 192, also known as Irlo Bronson Memorial Highway. The computer had no listing for the museum, which isn't in the yellow pages. The address didn't work, either: The street was misspelled in TravTek's data base. Sorry, Elvis—maybe another time.

By Richard Truett in Orlando



DASHBOARD ROAD MAP: THE TRAVTEK SYSTEM AT WORK

male voice with a Scandinavian accent (dubbed "Sven" by the engineers) advised me. "In 9/10ths miles, drive through the intersection onto State Road 436," Sven said.

Then he got confused. Heavy traffic should appear as yellow dots on the screen or as a written warning. But just before I reached a three-mile backup, Sven said: "No traffic problems to report." When he told me to "turn right onto U.S. Highway 17-92," I had 10 yards to change lanes and make the

Cover Story



HOT GROWTH COMPANIES

BUSINESS WEEK'S ANNUAL RANKING OF THE 100 BEST SMALL CORPORATIONS

Last year was arguably the worst year in history for the American automobile industry. The Big Three carmakers racked up \$7.5 billion in losses, and they announced plans to lay off thousands of workers. But 100 miles outside of Detroit, Spartan Motors Co., a tiny auto-parts manufacturer, was running at breakneck speed. From June to December alone, the Charlotte (Mich.) company nearly doubled its 1990 sales of \$51 million. The reason: Manufacturers of large vehicles, such as mobile homes and fire engines, just couldn't get enough of Spartan's innovative customized chassis. "While other people were standing still, complaining about the recession, we were out there leaving them in the dust," says Executive Vice-President John Szykiel.

Spartan wasn't the only one. BUSINESS WEEK's Hot Growth list is home to 99 more such exceptions—companies whose sales streaked heavenward while much of the rest of Corporate America languished. Sales at these high-flying businesses grew 48.3%, vs. 6.2% for the Standard & Poor's industrial-stock index. Earnings advanced 100.9%, compared with a decline of 14.3% for the industrials. And return on invested capital at the Hot Growth companies jumped 24.8%, vs. 10.1%.

LOOSER LENDERS. Now, as the nation appears to be inching out of its funk, companies of every size are looking forward to even brighter days. Business and consumer spending are up, and banks seem more willing to lend to small

and midsize companies than they have been in years. But that doesn't guarantee great results for growth companies. Because they tend to chase specialized markets with little competition, these small companies often don't follow broader economic or industry trends, notes David L. Birch, president of Cognetics Inc., a Cambridge (Mass.) economic research firm.

Stockholders had better hang on to their seats. Investors have already started to funnel their money away from growth stocks into blue chips. Shares in the Hot Growth 100 are trading at an average of 27% below their 52-week highs. "We've seen a shift in the marketplace from growth stocks to value," says Thomas D. Stevens, chief investment officer at Wilshire Asset Management, a

pension-fund manager. "The best performers in 1991 are going to be some of the worst in 1992" (page 96).

Whatever their fate in the recovery, BUSINESS WEEK's Hot Growth companies will look back fondly on 1991. Many rode out the recession by being in the right place at the right time. The software business, represented by 10 companies, continues to see strong demand for systems to improve order processing, customer service, and product delivery. A prime example: Software maker Artisoft Inc., this year's No. 1 Hot Growth company, has saved customers millions by linking personal computers and making them mimic a costly mainframe.

CHIPS AHoy. In the semiconductor industry, orders keep pouring in from an ever-broader range of manufacturers.

Three of the five Hot Growth chipmakers—Xilinx, Sierra Semiconductor, and Integrated Circuit Systems—averaged 100% or better annual profit gains over the past three years.

Another Hot Growth favorite is the health care industry. Insurers and employers are continuing to hunt for ways to cut medical costs, and that bodes particularly well for companies that offer solutions, such as managed mental health care provider American Biodyne Inc., No. 14.

The end of the recession should translate into major gains for hard-hit cyclical industries. And that could mean even better results for Hot Growth companies such as Insituform Mid-America Inc., which is in the messy business of re-

HOTTEST OF THE HOT

SALES

	Millions of dollars*
SOUTHERN ELECTRONICS	\$149.8
PCA INTERNATIONAL	147.2
SOFTWARE SPECTRUM	146.1
COMMUNITY HEALTH SYSTEMS	143.4
HE-RO GROUP	139.3

*Latest four quarters

SALES GROWTH

	Average annual rate*
ARTISOFT	171.3%
PLATINUM TECHNOLOGY	168.8
OUTBACK STEAKHOUSE	164.7
CHECKERS DRIVE-IN RESTAURANTS	145.1
PARAMETRIC TECHNOLOGY	138.4

*Latest three years

EARNINGS

	Millions of dollars*
MAGMA POWER	\$35.1
CALIFORNIA ENERGY	29.9
XILINX	21.3
MARVEL ENTERTAINMENT GROUP	20.0
AMERICAN POWER CONVERSION	18.0

*Latest four quarters

EARNINGS GROWTH

	Average annual rate*
CHECKERS DRIVE-IN RESTAURANTS	718.0%
PLATINUM TECHNOLOGY	391.1
ARTISOFT	321.2
QUANTUM HEALTH RESOURCES	302.7
CHIPCOM	286.7

*Latest three years

MARKET VALUE

	Millions of dollars*
PARAMETRIC TECHNOLOGY	\$895
MARVEL ENTERTAINMENT GROUP	600
AMERICAN POWER CONVERSION	597
XILINX	597
BALLARD MEDICAL PRODUCTS	541

*As of May 10

PROFITABILITY

	Average annual rate*
ARTISOFT	64.3%
SOUTHERN ELECTRONICS	60.3
ZEBRA TECHNOLOGIES	60.0
CAMBEX	59.1
PLATINUM TECHNOLOGY	54.4

*Latest three years' return on invested capital

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC

pairing underground pipes and sewers.

A hallmark of successful growth companies is the ability to react quickly. Responding to intense competition in the low-margin photo-finishing business, Seattle FilmWorks Inc. has rolled out a new service: It has joined up with Federal Express Corp., which will pick up customers' film, fly it to Seattle for processing, and return the pictures to customers' doors the next day. SFW has also branched into several new businesses, such as printing illustrated brochures for real estate brokers and packaging private-label film for retailers such as Sears, Roebuck & Co.

COMPLACENCY FACTOR. When a small company is slow to react, the results can be ugly. Autodesk Inc., BUSINESS WEEK's No. 1 Hot Growth company for 1986 and 1987, controls some 70% of the worldwide market for PC-based computer-aided design software. But it hasn't introduced any successful new products in several years. Earnings are estimated to be off 31% this year, costs are climbing fast, and competitors are circling.

"When a company stops innovating, it's on the road to failure," says Birch. Autodesk recently replaced its CEO and introduced a host of new products and upgrades that it hopes will stem the slide. Len Rand, vice-president of Autodesk's AutoCAD Div., says the company "has recognized the need for change."

Important as it is to be nimble, you can't ignore the value of capital. In the past couple of years, small companies have had a tough time luring bank financing and venture capital. No one expects much of an upturn in venture capital, which totaled \$1.3 billion in the U.S. last year, down from a high of \$4.2 billion in 1987. But now, banks that were burned by real estate investments and leveraged buyouts in the late 1980s may be more willing to lend to small businesses again. According to a recent survey of 591 banks by accounting firm Grant Thornton, 31% want to increase their small-business loans.

Even the private-placement arena may yield some surprises. Last year, after the introduction of a Securities & Ex-

change Commission rule allowing non-registered securities to be traded among some institutional investors, the value of those placements surged 460%, to \$21 billion. Many financiers expect such investments to become even more popular.

The stock market has been a favorite source of funds for growth companies. Thirty-six of BUSINESS WEEK's Hot Growth companies went public in the past 12 months. While the recent slide in small stocks may cool the market for initial public offerings this year, plenty of people insist that growth stocks are as appealing as ever. "Now that the growth-stock market is not so heated up, it's a much more reasonable environment," says Claudia Mott, director of small-cap research at Prudential Securities Inc. "People will be glad to pay less than \$40 a share for a hot biotech company that doesn't have product yet."

Well, some people may. For those who prefer something a little more down-to-earth, there's always Spartan Motors and its customized chassis.

By Laurel Touby in New York

ARTISOFT

A NETWORKER THAT 'JUST SHOT OUT OF NOWHERE'

Jack Schoof knows a bargain when he sees one. The chairman of Artisoft Inc. recently bought a shiny new corporate headquarters in Tucson from the Resolution Trust Corp. for \$26 a square foot—around a third of the cost of building one. For his growing collection of classic cars, Schoof just snared a '37 Rolls limo from a struggling real estate developer for \$50,000. "I got a steal," he says.

C. John Schoof II's penny-pinching ways should come as no surprise to his customers. He has built a booming business by selling systems that link personal computers into networks at prices far below his competitors'. The company, which heads BUSINESS WEEK's 1992 list of Hot Growth Companies, has blasted from \$2.2 million in sales in 1988 to what analysts estimate will be more than \$70 million in the year ending June 30. Earnings growth has averaged 321% over the past three years. "They just shot out of nowhere," marvels Bradley K. Baldwin, a market researcher at Gartner Group Inc. in Santa Clara, Calif.

While the PC business is in a slump, providers of local-area networks, or LANs, are flourishing. For one thing, a network of inexpensive PCs can match



SCHOOF: \$2.2 MILLION SALES IN '88, MORE THAN \$70 MILLION THIS YEAR

the processing prowess of costly mainframes. Even small companies can save money by hooking their PCs together: A small network can share a single printer, for instance, saving the cost of buying one for each PC.

AMONG EQUALS. Artisoft has made its name in the \$900 million LAN software market with an inexpensive product called LANtastic, a "peer-to-peer" system in which every PC on the network is an equal. Most competing systems, such as those from market leader Novell Inc., require that PCs become "clients" of a dedicated "server" computer—which means that companies must buy a new

PC just to administer the network. Often, the system is so complex that companies must hire an engineer to manage it.

Artisoft's rapid rise has already triggered a rejoinder from Novell. In September, just three days before Artisoft went public, Novell announced that it was launching its own peer-to-peer design, at exactly the same price. Artisoft also must worry about Microsoft Corp., which is widely rumored to be upgrading its Windows software package to make it control peer-to-peer networks.

Schoof—rhymes with loaf—founded Artisoft in 1982 on \$40,000. By 1984, after a couple of disappointing products, his bank balance was down to \$1,800. He built a PC clone for himself, then another for a friend, and another, and another. By 1986, Schoof was running a \$2 million clone outfit out of a Tucson store front. Meanwhile, he was writing the software that would relaunch Artisoft as a LAN company in 1988.

Now 33, he's trying to move Artisoft beyond simply routing data through cables. A product called Sounding Board is a good example: It hooks a telephone handset to the computer so that users can send voice messages to one another through the network. And, of course, he hasn't given up his search for bargains. Schoof's latest acquisition was Performance Technology Inc., which will give Artisoft the ability to link much more powerful Unix computers. As for spending on himself, there are still five empty stalls in Schoof's 11-car garage.

By Larry Armstrong in Tucson

THROW ANOTHER, UM, STEAK ON THE BARBIE, MATE

Stuffed kangaroos and koalas hang from walls decorated with maps of the land down under. The menu features such items as kookaburra wings, bloomin' onions, and walkabout soup. But truth be told, mate, the Outback Steakhouse Inc. chain is about as Australian as an afternoon at Wrigley Field. There isn't even a single genuine Aussie recipe in the kitchen, concedes Chairman Chris Sullivan. "It's only Australian in the way we talk about it."

Not that anyone is complaining. Systemwide sales at Tampa-based Outback, including company-owned restaurants, joint ventures, and franchises, shot from \$34 million in 1990 to \$91 million in 1991. Despite some analysts' claims that its stock is overvalued, Outback continues to sizzle. First-quarter sales gained 158%, thanks in part to the opening of six new restaurants. Earnings for the quarter totaled \$2.3 million, a 153% gain.

Sullivan and co-founder Robert Basham may not be Australian, but they do have lots of restaurant experience. Sullivan, 43, ran the Bennigan's chain before splitting off to develop a string of Chili's restaurants in Florida. Basham, 45, is also a veteran of Bennigan's. He last worked as regional operations director



ROO 'N' BREW: WALLABY WANNABES SULLIVAN, GANNON, AND BASHAM

at Chili's. They formed Outback four years ago and now have 55 restaurants. Along with Operations Vice-President J. Timothy Gannon, they aim to open 25 to 30 new restaurants this year and next.

QUEUING UP. Outback's secret is big steaks at low prices, with an average bill of only \$15 a person. The company saves money by converting inexpensive space in strip centers instead of building stand-alone stores like Bennigan's or Chili's.

And the restaurants, which serve only dinner, are sparsely decorated. "Their 'box' is not a high investment, so they deliver a lot of value to the plate," observes Malcolm Knapp, a New York food-service consultant.

In many Outback markets, that value has customers waiting in line for up to 90 minutes to order beefy steaks—at a time when the nation is supposedly turning to healthier foods. Knapp figures it's a matter of indulging when eating out. "When they go out, they really want a good steak," he says. "This is a treat."

One of the innovations that may give Outback some longevity is its management system. Every Outback general manager must pay \$25,000 for a 10% stake in the restaurant. General managers, whose names appear above the front door, must also sign five-year service contracts guaranteeing they'll stick around. "We wanted stability," explains Basham. "The GMs have a whole lot of interest in taking care of business."

Still, many wonder how long Outback can last. "There are big lines, and the food is only good, not great," says Tom Feltenstein, a West Palm Beach (Fla.) food-service consultant. "It doesn't have that 'come back' feeling." That hasn't seemed to worry investors. At 29, Outback's shares are trading at some 43 times earnings. "To buy at the current multiplier would be kind of silly," offers Knapp. Then again, so is naming a plate of chicken after the kookaburra—but it seems to be working.

By Bob Andelman in Tampa

SOFTWARE SPECTRUM

HAVE THEY GOT A PROGRAM FOR YOU

Judy O. Sims always intended to join her husband full-time at their fledgling business, a vendor of personal-computer programs called Software Spectrum Inc. But in 1985, when it came time for her to leave her job at the Dallas office of Grant Thornton, it wasn't easy. She had worked hard to become a partner at the accounting firm, and she felt some guilt for turning her back on the women who looked to her as a role model. "It was difficult knowing I was walking away from all of that and into something where the future was a lot less secure," she says.

Dangerous as it may have seemed at the time, Sims's decision to take the plunge turned out to be a smart one. Based in Garland, Tex., Software Spectrum has been on a rocket ride, soaring



CEO SIMS: FINDING THE RIGHT STUFF—FOR THE RIGHT PRICE—BOOSTED PROFITS 98%

to No. 2 in U.S. sales of business software such as Lotus 1-2-3 and Windows. It trails only giant retailer Egghead Inc. After BUSINESS WEEK's 1992 rankings were compiled, it reported \$158.9 million in revenue for the year ended Mar. 31. Profits soared 98%, to \$3.8 million. CEO Sims, 39, handles most of the day-to-day

business. Husband Richard, 37, is president. He heads the sales force.

In a business where everyone sells the same products, Software Spectrum has found an edge in low costs, low prices, and good service. Through its extensive software data base, the company has established a reputation in the industry for

tracking down hard-to-find software packages, such as On Time For Windows for a Baxter Healthcare Corp. local-area network. "They bent over backward to find that oddball software for us," says Glen Jurmann, Baxter's section manager for office technology.

The Simses, along with partner Frank Tindle, now retired, entered the software business with a pair of retail outlets. The three CPAs scraped together \$40,000 for the startup. But it didn't take

long to figure out that large corporate clients were a more lucrative target than the general public and small businesses. They quickly switched to direct sales and dumped the stores in 1989.

'SUBSTANTIAL LEAD.' Now, the Simses are looking for new ways to fuel growth. One area may be the European market, where major rival Corporate Software Inc. is already well entrenched. Says its CEO, Morton H. Rosenthal: "They can enter the market, but it's go-

ing to be tough because we have a pretty substantial lead."

That doesn't faze Judy Sims, who is not easily intimidated by competitors—or stereotypes. "It's easier for some women to feel their chances to succeed are not the same as a man's," she says. "But if you hang in there and do what you're supposed to be doing—conducting business—you can succeed."

By Stephanie Anderson Forest in Garland, Tex.

NATIONAL REHABILITATION

GETTING INJURED WORKERS BACK ON THE JOB FAST

To William F. Youree, chief executive of National Rehabilitation Centers Inc., injured workers are a lot like injured athletes: The quicker you get them back in the game, the happier they are. Combining exercise and work-simulation drills, National Rehab's physical therapists help workers recover quickly from back strain, repetitive-motion disorders, and other muscular and bone injuries. "After all, our patients depend on their bodies to make a living," says Youree, 44.

Fast turnarounds are a winning strategy for National Rehab, a chain of 33 clinics in 10 states. Last year, net income at the Brentwood (Tenn.) company jumped 63%, to \$1.9 million, while revenues surged 88% from a year earlier, to \$24 million.

FEW THERAPISTS. By far the most common workplace affliction, sprains and strains account for more than 50% of all on-the-job injuries, according to the Na-



YOUREE: LAST YEAR, HIS COMPANY'S NET INCOME JUMPED 63%

tional Council on Compensation Insurance (NCCI). But only in the past five years have employers realized how helpful physical therapy can be in treating and preventing these ills, says Marilyn Moffat, president of the American Physical Therapy Assn. In fact, one obstacle facing Youree is a critical shortage of physical therapists.

Youree, a former hospital administrator, has capitalized on the explosion in physical therapy while offering rehabilitative treatment at rates lower than at traditional hospitals. The company holds down costs by monitoring diagnostic and treatment charges, much like a health maintenance organization or preferred provider network. And because National Rehab stresses returning employees to work as quickly as possible, it helps save employers money on lost wage claims.

This is Youree's second tour of duty at National Rehab. He first joined the then-struggling company in 1987 as vice president of operations. He quickly left to run another rehab outfit, but was lured back to turn National Rehab around seven months later by its venture-capital investors.

Now, he plans to buy 4 to 10 more centers over the next three years. All are bound to benefit as escalating health care costs push up workers' compensation claims. Youree figures the dollar value of claims will quadruple, to \$8 billion a year, by decade's end—an estimate supported by the NCCI. Even if they're only half right, that's still more sore muscles than any one company could ever hope to soothe.

By Walecia Konrad in Atlanta



PAUL AND KEN GOLDIN: THEY COLLECTED BASEBALL CARDS FOR YEARS, THEN . . .

Score Board

FROM COLLECTIBLES, A NICE COLLECTION OF CASH

Joe DiMaggio is always getting pestered by autograph hounds, sometimes even when he's eating. But when Paul Goldin asked the former Yankee great for his signature over lunch last October, he was happy to oblige. Goldin, chairman of Score Board Inc. was offering DiMaggio up to \$6 million in return.

What Goldin arranged at lunch that day was the exclusive rights to Joltin Joe's autograph for two years. Now



If you run database applications on a mainframe, we admire your patience.

Computers have spoiled us all.

When we first saw them finish tasks in minutes that used to take hours, we were impressed. When they did it in seconds, we were ecstatic.

But then your mainframe took on more tasks, more users, more data. And now, with all the other demands being placed on the host, your database users have to sit there and wait for their information.

Quite a few companies have solved that problem by offloading some of their mainframe applications to Sun™ SPARCserver™ systems.

Our new multiprocessing SPARCserver 600MP Series is the very model for fast database throughput, delivering some

of the industry's lowest costs per transaction.*

A Sun SPARCserver makes your users more productive too, giving them timely and transparent access to all systems on the network — including the mainframe. So your people keep working, not waiting.

And to keep them working, all major DBMS vendors offer their software products on Sun systems.

Look, computers impressed you once. A computer can impress you again. Call 1-800-426-5321, ext. 465, for our Database Performance Brief.

Go on, call. After all, your company has waited long enough.



 **Sun Microsystems**
Computer Corporation

*Among all the UNIX servers made today, the Sun SPARCserver 600MP recently scored the highest Transaction Processing Performance Council benchmarks for price and performance (TPC-A). Details will be included in the Database Performance Brief offered above. ©1992 Sun Microsystems, Inc. Sun, Sun Microsystems and the Sun logo are trademarks or registered trademarks of Sun Microsystems, Inc. All SPARC trademarks, including the SCD Compliant logo, are trademarks or registered trademarks of SPARC International, Inc. SPARCserver is licensed exclusively to Sun Microsystems, Inc. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. All other product or service names mentioned herein are trademarks of their respective owners.

Cover Story

when he signs his name on any baseball memento, Score Board sells it and keeps approximately 35% of the take. These simple arrangements, combined with a surging interest in sports trading cards, have Score Board on a winning streak in the \$2 billion-plus sports memorabilia market. Since 1989, its net income has catapulted 905%, to \$6 million, on an 822% sales gain, to \$59 million.

Goldin, 60, founded Score Board with his son, Kenneth, 26, back in 1987. Baseball-card collectors since the early 1970s, they got the idea after attending a jam-packed sports-card convention. "I thought: 'There's got to be a business opportunity here,'" says Paul, who was then president of a small health care company that later went bankrupt because of heavy competition and decreased Medicare payments. He persuaded

a New York investment firm, the now-defunct Greentree Securities, to underwrite an initial public offering that raised \$2.2 million. The Goldins invested the proceeds in bulk lots of new baseball cards, sorting out the best players and reselling them at a premium.

'THE HOTTEST.' In 1988, they branched out by acquiring Game Time, a maker of trading cards and trivia board games. Soon, they saw a burgeoning market for autographs and began signing up sports stars from Joe Montana to Muhammad Ali. "They've got practically all the hottest athletes," says David Benhaim, an analyst with Adams, Harkness & Hill Inc. in Boston. By having someone from Score Board watch as the players sign, the company can promise buyers that each signature is authentic.

Now, Ken Goldin is heading a foray

into the \$2.7 billion entertainment memorabilia market. Founded in 1990, Score Board's Catch a Star Collectibles Div. sells products such as John Lennon gold-record plaques and Elvis Presley jewelry. The unit now produces about 7% of Score Board's revenues, but it's a risky business. Warns Karen Raugust, editor of *The Licensing Letter*: "People aren't going to get sick of baseball, but a Batman craze will die out."

Ken insists that Score Board won't get burned by depending too heavily on one faddish product. Besides, the company's mix will always include a healthy dose of sports, the Goldins' first love. "I've met every sports hero I've ever had," Paul enthuses. "Except Michael Jordan. It's a little difficult to get to him, but I think eventually we will."

By Laurel Touby in Cherry Hill, N.J.

MOVING TOFU INTO THE MAINSTREAM

The typical 1970s health-food store always seemed so... unhealthy. Cramped, poorly managed, and often grungy, it didn't hold much appeal for nonhippie consumers. Contrast that image with the thriving, 20,000-square-foot Whole Foods Market in conservative Richardson, Tex. This brightly lit supermarket features mouth-watering pastries made with unbleached flour, preservative-free cat food, and towels made of recycled paper. The prices are often steeper than at regular groceries. But, says loyal shopper Mary Anne Redmond: "It's worth it knowing there's not a lot of crud" in the food.

Whole Foods Market represents the industry's coming of age. The Austin (Tex.) company, the first of its kind to go public, is the largest operator in a rapidly growing business. Its 12 stores stretch from Palo Alto, Calif., to Chapel Hill, N.C. Whole Foods had sales of \$92.5 million in its last fiscal year, ended Sept. 29, with profits of \$1.6 million. Operating margins were a healthy 3.7%, vs. an average of 2.6% for conventional supermarket chains.

STREET CLEANER. Whole Foods' success could draw unwanted attention from traditional supermarkets, which have typically sold few health foods. "The No. 1 risk to Whole Foods would be that supermarkets just plow into the category," says analyst David C. Childe of Robertson, Stephens & Co. He doesn't expect supermarkets to succeed in the long run



FOUNDER MACKEY SAYS HIS COMPANY IS "BASED ON LOVE INSTEAD OF FEAR"

but fears they might pressure Whole Foods' earnings in the meantime.

That doesn't worry Chairman John Mackey, a college dropout who founded Whole Foods in 1980. He intends to stick to his methodical game plan: adding one new region and one new store in each existing region every year. And he insists Wall Street pressures won't change the company's team-oriented management style or its donations of 5% of after-tax profits to charitable causes. "Wall Street isn't going to corrupt Whole Foods Market," vows Mackey, 38. "We're going to purify Wall Street."

Idealism is still running rampant at Whole Foods. Mackey espouses "empowerment" of his 1,300 "team members" (employees) and speaks unabashedly

about creating an organization "based on love instead of fear." In the stores that translates into departmental teams responsible for their own buying, pricing, hiring, and firing. Bonuses are based on team goals.

At times, though, Mackey sounds like any other hard-nosed capitalist. He rails against the Food & Drug Administration's crackdown on what it considers misleading health claims. He calls a age-discrimination suit against the company "absurd." And as for the 18 months of union picketing at his Berkeley (Calif.) store, Mackey says: "We're not antiunion. We're beyond union." As long as he's not "beyond profits," investors aren't likely to complain.

By Wendy Zellner in Austin, Tex.

THE ONE STANDARD IS THE SYMBOL MOTOROLA USES TO REPRESENT SIX SIGMA™ QUALITY. IT CHARTS A PATH TO PERFECTION AND IS A DAILY CHALLENGE FOR EACH OF OUR EMPLOYEES THROUGHOUT THE WORLD.

We have set our sights extremely high, engaging in a quest for perfection that will never end. Not even when we reach Six Sigma quality. Because we believe we can always uncover new ways to improve our products. Making them better. Producing them faster. Lowering the cost to the customer. That's the essence of renewal. It's a commitment to constantly reevaluate and sharpen our business processes. A commitment that allows us to anticipate solutions to product and service needs. Which can only make our customers happier.

And that, of course, means the world to Motorola.
For more information about the principles that guide us, call for a copy of "The New Truths of Quality" at 1-800-352-8062.



WILL TODAY'S HOT STARS TURN COLD TOMORROW?

Investors love small-company stocks—but many are flameouts

For most of 1991, fast-growing retailer Cascade International Inc. drew raves. Analysts rated it a "strong buy." Small-company mutual-fund portfolio managers loaded up on the stock. Major publications, including *BUSINESS WEEK*, reported professional investors' praise for the stock. But last November, Cascade's founder disappeared. Allegations of fraud sent the stock plummeting, and in December, the company filed for bankruptcy.

Cascade is one of the more spectacular flameouts of recent years. But while fraud makes for big headlines, many fast-growing young companies go astray in less dramatic ways every year. KnowledgeWare Inc. fell from *BUSINESS WEEK*'s Hot Growth list this year after its track record of double- and triple-digit growth turned to a loss in 1991's third quarter. In the past year, the software company was hit with a lawsuit alleging that it was recording revenue too soon. KnowledgeWare also saw two top executives resign and experienced heavy selling by a large number of insiders. The stock slid from a high of 43½ in early 1991 to 10½ in October and now hovers around 12.

COPYCATS. Yet such horror stories don't dissuade many investors from chasing what might be the next Xerox Corp. or Wal-Mart Stores Inc. "I think the benefits of small-stock investing outweigh the risks," insists Tom Maguire, portfolio manager of the \$155 million Safeco Growth Fund Inc., which lost \$2 million on Cascade.

While small-stock investing can be tempting, investors should keep a sharp eye out for warning signs. The first step in evaluating a small company's potential is to look at top management. "A good top management in a small company can build a very successful business in most any field, and lousy

management can screw up the best of businesses," says John H. Laporte, portfolio manager of T. Rowe Price's \$1.3 billion New Horizons Fund Inc. Most individual investors can't take the time to get to know management, but they can check for high inside ownership of the stock—a sign that the interests of management are aligned with those of shareholders. A warning signal: heavy selling by insiders when a stock is going public.

It's also a good idea to look at who sits on a company's board of directors. Cascade's board included several members in fields that seemed to have little relevance to the cosmetics and clothing business. It included the CEO's dentist, a casino executive, and a PhD in hypnotherapy, notes Howard M. Shilit, an American University accounting professor and the author of an upcoming book on misleading information in financial reports. Another red flag that can be found in a prospectus: questionable transactions, such as low-interest loans to executives and special business relationships with family members.

The next stop is the company's financial statements. One of the most common maneuvers is to record revenue before it is earned, notes Shilit. For example, a company might receive a large payment up front for services that will extend over months or years—but may still record all the revenue at once. Some companies shift current expenses to a later period, perhaps by depreciating costs too slowly or failing to write off worthless assets. Other strategies to smooth out earnings: deferring current income to a later period or shifting future expenses to an earlier period.

'GONE-GONE.' Investing in small-company mutual funds is a way to spread the risk among a greater universe of companies. Over the past two years, the average small-company fund rose 17.48%, compared with 11.38% for the average equity fund, according to Chicago's Morningstar Inc. For the same period the S&P 500 was up 15.78%.

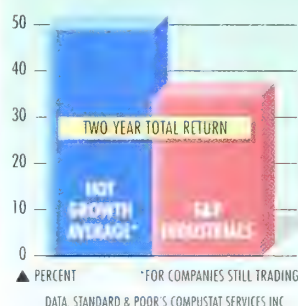
This year, however, the picture is rather bleak, with small-company funds down 1.54%—compared with equity funds' 0.97% decline. But performance within the small-company universe can be quite variable. "The more cautious, value-oriented funds that steer clear of expensive stocks are among the market leaders this year," says John Reken, editor of the *Morningstar Mutual Funds* guide. "The go-go funds are gone-gone." The top small-company performers this year are Heartland Value Fund and Fidelity Low-Priced Stock

Fund, which have risen 18.43% and 12.87% respectively.

Burrowing into financial statements and prospectuses should turn up clues to a company's future. But as Cascade drove home, even people who invest in small stocks for a living can get fooled. Lists such as *BW*'s Hot Growth rankings provide good starting points for checking out small companies. But it's up to investors to take precautions to keep from getting burned.

By Suzanne Woolle
in New York

BIG RETURNS FROM BW'S 1990 WINNERS



BW'S CLASS OF 1990

THE WINNERS...

Company	Two-year total return (percent)
50-OFF STORES	650.0%
AMERICAN POWER CONVERSION	455.7
BALLARD MEDICAL PRODUCTS	330.3
SURGICAL CARE AFFILIATES	313.7
MEDSTAT SYSTEMS	262.1
DUTY FREE INTERNATIONAL	239.0
CABLETRON SYSTEMS	238.5
DIGI INTERNATIONAL	232.6
HEARTLAND EXPRESS	213.0
TSENG LABORATORIES	189.6

...AND THE LOSERS

Company	Two-year total return (percent)
CONCORDE CAREER COLLEGES	-91.9%
FINANCIAL NEWS NETWORK	-86.8
WEITEK	-79.3
MARTIN LAWRENCE LIMITED EDS.	-78.1
QUIKSILVER	-72.6
STEVENS GRAPHICS	-71.1
GEODYNE RESOURCES	-70.0
TOP AIR MANUFACTURING	-68.2
CODE-ALARM	-62.7
OREGON METALLURGICAL	-62.2

Calculated on basis of stock price as of Apr. 30; excludes companies no longer trading

DATA: STANDARD & POOR'S COMPUSTAT SERVICE INC.

THE BEST SMALL COMPANIES

To win a position in this table, a company must excel in three ways. The selection process begins by ranking companies according to their three-year results in sales growth, earnings growth, and return on invested capital. The ranks that appear in the table are calculated from these numbers. A company's composite rank is the sum of 0.5 times its rank in return on total capital, plus 0.25 times each of its growth ranks.

Standard & Poor's Compustat Services Inc., which has computerized financial data on 7,100 publicly traded corporations, provided the pool of companies from which winners were selected. To qualify, a company has to have annual sales of more than \$10 million and

less than \$150 million, a current market value greater than \$1 million, a current stock price greater than \$2, and be actively traded. Banks, insurers, real estate firms, and utilities are excluded. So are companies with sharp declines in current financial results.

Sales and earnings are the latest available through the most recent 12 months. Earnings include net income from continuing operations, before gains or losses from extraordinary items.

Increases in sales and profits are calculated using the least-squares method. If results for the earliest year are negative, the average is for two years.

Return on capital is earnings plus minori-

ty interests and tax-adjusted interest expense expressed as a percent of total debt and equity. For ranking purposes, the maximum allowable annual return on invested capital is 100%. If companies have made substantial accounting restatements, long-term returns may be averaged for two years instead of three years.

Time periods vary according to the month of a company's fiscal yearend. Profitability and growth are calculated through the most recent fiscal year.

Stock price data are as of May 1, 1992. A ● indicates that a company also appeared in last year's rankings (BW-May 27, 1991). An alphabetical index of the companies appears at the end of the table.

COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA				
	SALES \$ MIL	EARNINGS \$ MIL	INCREASE (%)		RETURN ON CAPITAL	STOCK PRICE		P/E RATIO	MARKET VALUE \$ MIL	
			SALES	PROFITS		52-WEEK HIGH LOW	RECENT			
1 ARTISOFT (ASFT) Tucson 602-293-6363 Software and hardware for computer networking	64.3	10.8	171.3	321.2	64.3	35 — 17	26	39	450	
2 PLATINUM TECHNOLOGY (PLAT) Lombard, Ill. 708-620-5000 Designs software compatible with IBM mainframes	32.1	5.5	168.8	391.1	54.4	25 — 9	16	59	290	
3 OUTBACK STEAKHOUSE (OSSS) Tampa 813-282-1225 From Florida to Texas, it serves steak, chicken, and seafood	66.2	7.2	164.7	283.7	43.9	40 — 12	29	43	302	
4 SCORE BOARD (BSBL) Cherry Hill, N. J. 609-354-9000 ● Baseball cards are its game. Plus other sports memorabilia	58.6	6.0	104.6	211.2	38.0	41 — 7	28	22	139	
5 TECHNOLOGY SOLUTIONS (TSCC) Chicago 312-819-2250 Designs and develops companywide computer systems	63.2	10.6	57.5	134.4	39.8	31 — 17	24	25	286	
6 DANEK GROUP (DNKG) Memphis 901-396-2695 Manufacturer of orthopedic equipment for doctors and hospitals	48.7	7.9	76.7	112.8	34.7	34 — 9	27	58	453	
7 VIDEO LOTTERY TECHNOLOGIES (VLTS) Bozeman, Mont. 406-586-4423 Viva Las Vegas! It makes video gaming machines	32.2	4.1	51.7	178.5	35.1	40 — 17	31	68	315	
8 PARAMETRIC TECHNOLOGY (PMTCT) Waltham, Mass. 617-894-7111 Software for mechanical and design engineers. UNIX-compatible	61.3	14.4	138.4	154.6	24.6	38 — 11	36	69	895	
9 ENVIRONMENTAL ELEMENTS (EEC) Baltimore 301-368-7000 Breathe easier. Manufactures air pollution control systems for commercial use	97.6	6.0	31.5	140.2	46.8	23 — 12	16	18	107	
10 CAMBEX (CBEX) Waltham, Mass. 617-890-6000 ● Your IBM mainframe needs more memory? Cambex will upgrade it	46.2	8.3	41.0	76.9	59.1	24 — 5	13	13	102	
1 CHECKERS DRIVE-IN RESTAURANTS (CHKR) Clearwater, Fla. 813-441-3500 The name says it all—drive in, pig out	51.1	5.2	145.1	718.0	21.4	36 — 14	26	79	350	
2 AMERICAN POWER CONVERSION (APCC) W. Kingston, R. I. 401-789-5735 ● Holding the line: Computer power systems and surge protectors	107.0	18.0	74.5	75.1	33.9	38 — 9	28	35	597	
3 TRANSMEDIA NETWORK (TMNI) Miami 305-892-3300 ● Dinner anyone? Its cards get you a 25% discount at 700 restaurants	15.8	1.1	63.8	210.2	23.4	11 — 5	10	33	34	
4 AMERICAN BIODYNE (ABDN) South San Francisco, Calif. 415-742-0980 Manages mental-health services for insurers and self-insured companies	67.5	2.9	90.5	80.7	25.4	19 — 9	11	20	61	
5 MARCAM (MCAM) Newton, Mass. 617-965-0220 Application software for manufacturers	64.5	6.5	83.9	141.6	22.3	30 — 15	24	31	199	
6 STATE OF THE ART (SOTA) Irvine, Calif. 714-753-1222 Count on this: Developers of accounting software	20.1	5.2	40.0	63.8	45.3	17 — 6	12	22	112	
7 SOUTHERN ELECTRONICS (SECK) Tucker, Ga. 404-491-8962 ● Distributors of PCs, peripherals, and cellular-phone products wholesale	149.8	4.5	34.3	60.6	60.3	20 — 6	15	14	46	
8 LUNAR (LUNR) Madison, Wis. 608-274-2663 Makes equipment that measures your bone density	23.9	5.0	54.2	152.1	21.6	30 — 18	23	25	114	

THE BEST SMALL GROWTH COMPANIES

COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA				
	SALES \$ MIL	EARNINGS \$ MIL	INCREASE (%) SALES	PROFITS	RETURN ON CAPITAL	STOCK PRICE 52 WEEK HIGH LOW		RECENT	P/E RATIO	MARKET VALUE \$ MIL
19 U. S. ROBOTICS (USRX) Skokie, Ill. 708-982-5010 Talk to me! Manufactures data communication products, such as modems	94.3	8.6	39.9	96.6	27.2	24—12		18	20	167
20 XILINX (XLNX) San Jose, Calif. 408-559-7778 ● Makes chips that can be programmed over and over again	135.8	21.3	67.5	99.8	21.8	33—19		26	29	597
21 SOFTWARE SPECTRUM (SSPE) Garland, Tex. 214-840-6600 It makes and sells software and does mail order, too	146.1	3.1	35.3	62.6	37.4	26—10		20	18	63
22 HE-RO GROUP (HRG) New York City 212-840-6047 The name game: Licensing for women's apparel designers	139.3	9.8	39.7	69.5	33.8	23—11		14	8	92
23 ULTRA PAC (UPAC) Rogers, Minn. 612-428-8340 ● Earns its daily bread making recyclable bakery and deli-packaging products	18.3	1.3	89.3	124.6	20.3	18—6		11	26	34
24 PROGRESS SOFTWARE (PRGS) Bedford, Mass. 617-275-4500 Software to make more software. Used primarily by programmers	63.7	6.6	56.2	75.7	23.7	47—28		35	32	204
25 ZEBRA TECHNOLOGIES (ZBRA) Vernon Hills, Ill. 708-634-6700 Bar-code printers and specialized labels	50.0	11.8	36.0	40.8	60.0	22—15		18	17	216
26 XYPLEX (XPLX) Boxborough, Mass. 508-264-9900 Manufactures network communication products	45.7	6.1	55.6	87.4	23.4	31—13		21	21	120
27 SULLIVAN DENTAL PRODUCTS (SULL) West Allis, Wis. 414-321-8881 ● Open wide. Supplies and equipment for dentists all across the country	82.4	3.7	43.2	59.0	29.1	22—11		18	41	146
28 IMRS (IMRS) Stamford, Conn. 203-323-6500 Financial software—development, sale, and support is its business	40.8	3.1	66.6	159.7	20.2	22—12		15	30	93
29 UTAH MEDICAL PRODUCTS (UTMD) Midvale, Utah 801-566-1200 ● Manufacturers of disposable blood-pressure monitors for critical care	31.4	5.7	30.6	57.1	35.6	25—15		16	22	121
30 SIERRA SEMICONDUCTOR (SERA) San Jose, Calif. 408-263-9300 Manufacturer of semiconductor chips	92.8	15.3	22.2	110.9	29.4	27—13		18	12	180
31 TSENG LABORATORIES (TSNG) Newtown, Pa. 215-968-0502 ● Chips off the old block: Maker of computer chips	64.4	10.7	39.6	42.6	35.6	20—6		12	21	226
32 U. S. HOMECARE (USHO) Hartsdale, N.Y. 914-946-9601 It lends a helping hand with its home health care services	53.6	3.0	42.5	253.5	19.9	20—6		11	25	76
33 CHIPCOM (CHPM) Southborough, Mass. 508-460-8900 Networking hardware and software, mostly for PCs	55.2	5.4	69.3	286.7	16.2	31—12		22	32	174
34 BALLARD MEDICAL PRODUCTS (BMED) Draper, Utah 801-572-6800 ● Take a deep breath: Medical, mainly respiratory, devices	43.5	11.5	36.6	50.6	29.0	35—14		29	50	541
35 COMMUNITY HEALTH SYSTEMS (CHSI) Houston 713-537-5230 Owner and operator of acute-care hospitals in nonurban areas	143.4	9.6	11.8	90.2	28.9	27—16		16	9	88
36 COMCOA (CCOA) Wichita 316-683-4411 It rents out the comforts of home—electronics and furniture rental centers	52.9	4.1	25.0	102.6	23.2	12—10		11	14	48
37 PCA INTERNATIONAL (PCAI) Matthews, N. C. 704-847-8011 Your family photographer, with outlets at mass merchandisers	147.2	7.0	7.3	46.2	48.5	19—12		14	16	100
38 MYERS (L. E.) (MYR) Rolling Meadows, Ill. 708-290-1891 These folks erect electrical power lines nationwide	97.2	4.2	16.6	65.3	30.5	25—13		20	12	49
39 SPARTAN MOTORS (SPAR) Charlotte, Mich. 517-543-6400 Assembly of motors and chassis for vehicles, motor homes, and fire engines	103.1	7.4	41.3	47.5	23.7	35—5		23	25	188
40 MERIS LABORATORIES (MERS) San Jose, Calif. 408-434-9200 White coat operation that processes lab tests for physicians	22.8	2.8	38.5	82.6	21.2	21—9		14	32	95
41 EASEL (EASL) Burlington, Mass. 617-221-2100 ● Greases the wheels of commerce with software for business applications	31.5	4.1	69.2	116.4	16.7	48—15		25	34	127
42 SEATTLE FILMWORKS (FOTO) Seattle 206-281-1390 Celluloid dreams: Processing of 35mm film sold via mail order	37.4	2.5	8.8	48.2	37.6	21—13		18	13	30
43 O. I. (OICO) College Station, Tex. 409-690-1711 ● Makers of instruments that detect environmental pollutants	17.9	1.8	29.8	52.9	25.1	18—8		12	24	40
44 BENCHMARK ELECTRONICS (BHE) Clute, Tex. 409-265-0991 ● Circuit boards are their business—assembly and sale	37.4	2.3	55.4	43.9	22.0	17—7		14	19	44
45 JEAN PHILIPPE FRAGRANCES (JEAN) New York City 212-983-2640 Take a whiff. Distributors of designer-knockoff fragrances	25.5	1.9	76.9	55.6	19.9	16—4		13	31	67
46 RALLY'S (RLLY) Louisville 502-245-8900 Quick bite. A hamburger chain located in 22 states	99.4	6.5	73.9	98.4	16.7	28—7		23	26	168
47 QUANTUM HEALTH RESOURCES (QHRI) Orange, Calif. 714-750-1610 Provides home nursing for the chronically ill	76.9	5.5	108.4	302.7	10.2	29—14		20	44	250

The Fox and the Grapes

*For mutual fund investors, the moral is:
Patience is a sound investment principle—as well as a virtue.*



Once there was a fox who spied a bunch of grapes. Try as he might, he could not reach them.

He skulked off muttering, "Those grapes are probably sour anyway."

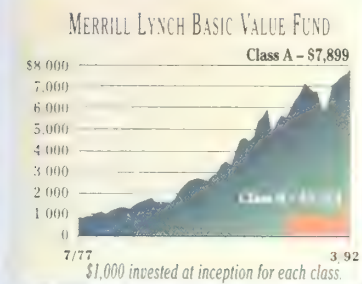
Just as he stalked away, a particularly ripe bunch fell to the ground.

When you invest, there's a strong case for patience.

The Merrill Lynch Basic Value Fund is one example of how a long-term approach may bring rewards.

The management of this Fund seeks capital appreciation, then income, by investing in securities, primarily equities.

We look for



Average annual total returns for 10, 5 and 1 year periods ended 3/31/92 are 16.35%, 6.76% and 4.74% for Class A shares and since inception (10/88) and 1 year period ended 3/31/92 are 7.04% and 6.87% for Class B.

stocks that the crowd may have overlooked but are ripe with future potential.

Say you had invested \$1,000 in

this Fund when we introduced it in 1977 and reinvested your dividends.

At the present time your account would show a balance of \$7,898.55.

Which investments will ripen and which will wither?

Merrill Lynch has the resources and skills to guide you in your

choices. Your Merrill Lynch Financial Consultant will be glad to give you additional information about the Merrill Lynch Basic Value Fund or any of our other mutual funds.

Call 1-800-637-7455, ext. 2854

For a copy of "The Investor's Guide to Mutual Funds" and a brochure and prospectus on the Merrill Lynch Basic Value Fund, Inc. call or send the coupon to: Merrill Lynch Response Center, P.O. Box 30200, New Brunswick, NJ 08989-0200

Name: _____ Address: _____

City: _____ State: _____ Zip: _____

Home Phone: _____ Business Phone: _____

Merrill Lynch clients, please give the name and location of your Financial Consultant.



Merrill Lynch

A tradition of trust.

Average annual total returns reflect a maximum initial sales charge of 6.5% for Class A shares and a maximum contingent deferred sales charge of 4% for Class B shares. Past performance is not an indication of future results. Investment return and principal value of the shares will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. For more complete information, including all charges and expenses, request a prospectus. Read it carefully before you invest or send money.



THE BEST SMALL GROWTH COMPANIES

RANK	COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA			
		SALES \$ MIL.	EARNINGS \$ MIL.	INCREASE (%) SALES	PROFITS	RETURN ON CAPITAL	STOCK PRICE 52-WEEK HIGH/LOW		P/E RATIO	MARKET VALUE \$ MIL.
48	ALLOU HEALTH & BEAUTY (ALU) Brentwood, N.Y. 516-273-4000 ● Distributor of health and beauty aids to retail outlets	118.8	1.5	29.0	33.5	28.5	9—3	6	13	16
49	50-OFF STORES (FOFF) San Antonio 512-653-8000 ● Twice as nice at half the price: Clothes, housewares, cosmetics	130.1	6.5	43.0	90.2	19.0	32—9	19	30	194
50	VALLEY SYSTEMS (VALE) Canal Fulton, Ohio 216-854-4526 Mop-up operations: An industrial cleaning service for companies	20.7	1.9	19.0	21.7	33.9	27—6	20	29	71
51	BGS SYSTEMS (BGSS) Waltham, Mass. 617-891-0000 ● Software for managing and evaluating computer systems	25.3	5.8	11.9	25.3	34.7	43—26	36	20	112
52	K-SWISS (KSWI) Pacoima, Calif. 818-897-3433 ● Tennis, basketball, hiking, volleyball: Footwear for fitness freaks	122.9	9.3	43.1	48.0	21.1	29—11	20	14	129
53	LANDAUER (LDR) Glenwood, Ill. 708-755-7000 ● Devices that measure radiation in workplaces such as hospitals and labs	26.8	7.6	9.1	12.6	36.0	21—14	17	19	146
54	BERTUCCI'S (BERT) Woburn, Mass. 617-935-9700 Say cheese at this pizza and pasta restaurant chain	37.5	3.3	48.7	63.6	19.7	23—10	17	38	131
55	MICROGRAFX (MGXI) Richardson, Tex. 214-234-1769 ● Designs graphics software for IBM-compatible PCs	39.6	4.3	49.1	84.2	18.6	21—7	17	30	127
56	AMERICAN MEDICAL ELECTRONICS (AMEI) Richardson, Tex. 214-918-8300 Broken bones need mending? Their bone growth stimulators will help	29.3	3.8	52.0	85.2	17.8	21—10	13	25	91
57	COMPUTER NETWORK TECH. (CMNT) Maple Grove, Minn. 612-550-8000 Builds high-speed networks for large-scale computer systems	23.8	1.8	54.0	179.7	14.1	5—3	4	36	65
58	MATRIX SERVICE (MTRX) Tulsa 918-838-8822 ● It builds oil tanks and does routine maintenance on refineries	99.5	7.4	87.8	111.8	12.4	30—16	19	24	174
59	RAINBOW TECHNOLOGIES (RNBO) Irvine, Calif. 714-454-2100 ● Outsmarting software pirates is its business	20.2	3.7	44.6	49.0	20.6	33—9	18	22	85
60	BEAUTICONTROL COSMETICS (BUTI) Carrollton, Tex. 214-458-0601 ● Sitting pretty with cosmetics manufacturing and marketing	61.7	5.9	21.1	13.3	30.9	22—13	19	24	134
61	INPUT/OUTPUT (IPOP) Stafford, Tex. 713-240-2200 Attuned to tremor and tremble: Manufacturers of seismic equipment	44.4	7.3	27.3	56.0	21.4	17—5	14	13	103
62	SEQUOIA SYSTEMS (SEQS) Marlborough, Mass. 508-480-0800 No down time: Manufacturer of fault-tolerant computers	80.6	8.2	67.3	123.2	11.7	18—10	15	16	125
63	NEWPARK RESOURCES (NPRS) Metairie, La. 504-838-8222 Supplies equipment for oil fields and their cleanup	61.5	4.5	19.6	85.7	20.7	12—6	9	12	77
64	OUTLOOK GRAPHICS (OUTL) Neenah, Wis. 414-722-2333 One-stop shop for printing and packaging	60.3	5.6	50.1	97.2	15.4	25—10	18	16	93
65	WHOLE FOODS MARKET (WFMI) Austin, Tex. 512-328-7541 Tofu time. Chain of 12 natural-food supermarkets	99.1	1.9	26.6	27.0	23.6	34—22	25	25	35
66	ENVOY (ENVY) Nashville 615-885-3700 It has the network that authorizes your credit-card purchase	31.5	6.5	22.7	90.3	19.9	18—10	14	23	146
67	ROTECH MEDICAL (ROTC) Orlando 407-841-2115 Supplies oxygen and IV equipment to hospitals and at-home patients	31.0	2.9	35.9	69.9	19.4	20—7	14	27	85
68	PHARMACY MANAGEMENT SVCS. (PMSV) Tampa 813-626-7788 ● Its advice helps workers' comp. insurers contain medical-claim costs	97.3	2.1	64.5	30.8	19.0	14—7	9	42	81
69	APPLE SOUTH (APSO) Madison, Ga. 404-342-4552 Served piping hot! Franchisee of casual, full-service restaurants	71.6	2.1	36.5	130.7	15.2	16—11	15	25	59
70	SONIC (SONC) Oklahoma City 405-232-4334 The Sunbelt is its territory, the American hamburger its specialty	58.8	5.4	26.0	51.8	21.1	33—15	25	36	191
71	NORTH ATLANTIC INDUSTRIES (NATI) Hauppauge, N.Y. 516-582-6500 Makes computers and PC-compatible communications products	61.1	4.1	22.7	58.8	20.8	9—6	9	8	31
72	NATIONAL REHABILITATION CTRS. (NRCT) Brentwood, Tenn. 615-377-2937 Home office of 30 physical rehabilitation centers	27.5	1.5	39.7	269.3	10.2	18—11	12	25	44
73	INSITUFORM MID-AMERICA (INSMA) Chesterfield, Mo. 314-532-6137 Ed Norton Dept. Reconstruction of underground pipelines, mostly sewers	54.6	6.4	34.7	70.4	18.7	18—12	16	20	127
74	TRM COPY CENTERS (TRMM) Portland, Ore. 503-231-0230 Distribution of copy machines to retail outlets	21.9	2.3	56.3	55.5	16.5	17—10	12	29	75
75	MARVEL ENTERTAINMENT GROUP (MRV) New York City 212-696-0808 The superheroes march on! Creator and publisher of comic books	126.9	20.0	23.3	202.3	15.8	33—9	25	31	600
76	BRIDGFORD FOODS (BRID) Anaheim, Calif. 714-526-5533 ● Sausage maker grinds out dough, deli foods, and frozen breads	94.5	4.6	15.6	18.4	24.1	25—11	19	38	176

**WE HAVEN'T CHANGED
OUR POSITION ON
WORKERS COMPENSATION
IN OVER 50 YEARS.**

THE BEST SMALL GROWTH COMPANIES

COMPANY (STOCK SYMBOL)	CURRENT RESULTS		THREE-YEAR AVERAGES			INVESTMENT DATA			
	SALES \$ MIL	EARNINGS \$ MIL	INCREASE (%) SALES	PROFITS	RETURN ON CAPITAL	STOCK PRICE 52-WEEK HIGH LOW	RECENT	P/E RATIO	MARKET VALUE \$ MIL
77 NATURE'S SUNSHINE PRODUCTS (NATR) Provo, Utah 801-342-4300 It shapes you up with nutritional, herbal, and personal-care products	77.9	4.5	17.5	9.9	23.9	16—8	12	22	100
78 AMERICAN PACIFIC (APFC) Las Vegas 702-735-2200 Power to reach the stars: Manufactures fuel component for space shuttles	65.0	10.5	88.7	70.0	10.2	41—10	34	21	209
79 TECNOL MEDICAL PRODUCTS (TCNL) Fort Worth 817-581-6424 Manufacturer of disposable medical products	56.6	9.2	18.8	31.8	22.6	21—14	17	22	216
80 PROTEON (PTON) Westborough, Mass. 508-898-2800 Its components let your computer reach out and touch another computer	100.5	6.8	33.4	190.3	12.5	19—10	12	26	167
81 CALIFORNIA ENERGY (CE) Omaha 402-330-8900 Turn on the juice: Producer of geothermal energy for electricity	117.7	29.9	107.6	60.4	10.9	17—11	13	17	425
82 MICROS SYSTEMS (MCRS) Beltsville, Md. 301-490-2000 Front desk, please. Its terminals check hotel guests in and out	40.6	3.7	26.8	131.4	14.5	8—4	7	15	52
83 MAXIM INTEGRATED PRODUCTS (MXIM) Sunnyvale, Calif. 408-737-7600 ● Design and manufacturing of integrated circuits	83.3	12.8	37.2	49.8	18.6	30—15	27	30	346
84 HENLEY INTERNATIONAL (HEN) Sugar Land, Tex. 713-240-2442 It's into wellness—mostly medical but also fitness supplies	54.2	1.8	66.9	73.1	10.1	24—7	16	25	45
85 PHOTOGRAPHIC SCIENCES (PSCX) Webster, N.Y. 716-265-1600 Don't send film to be developed. It makes handheld scanners	23.1	2.4	26.6	113.4	14.2	14—6	13	37	86
86 BOSTON ACOUSTICS (BOSA) Lynnfield, Mass. 617-592-9000 More than a woofer and a tweeter: Manufacturer of speakers	31.7	4.6	14.2	21.1	21.8	23—14	18	17	77
87 ROSS COSMETICS DISTRIB. CTRS. (RDCD) Duncan, S. C. 803-439-7854 It distributes smell-alikes—not designer—colognes for less	41.9	3.3	27.1	103.6	13.5	28—4	17	35	111
88 ASTRO-MED (ALOT) West Warwick, R. I. 401-828-4000 Data-recording equipment for manufacturers that need measuring up	29.8	10.6	12.7	68.0	19.0	29—13	25	8	81
89 AIRTRAN (ATCC) Minneapolis 612-726-5151 Regional airline: Flies you and yours around the Midwest	99.0	5.4	39.2	52.3	15.9	21—8	15	12	57
90 LIFETIME HOAN (LCUT) Brooklyn, N.Y. 718-499-9500 Cut out to be wholesalers of cutlery, kitchen tools, and gadgets	56.6	5.4	11.9	42.1	21.0	20—9	14	13	77
91 FALCON PRODUCTS (FLCP) St. Louis 314-991-9200 Decorators for the hospitality industry with furniture, booths, and more	41.1	2.9	8.3	53.0	20.1	15—5	13	17	48
92 LXE (LXEI) Norcross, Ga. 404-447-4224 Computer communication over radio frequencies—for warehouses, shops	41.9	3.6	40.0	64.6	13.4	23—12	15	24	80
93 MAGMA POWER (MGMA) San Diego 619-487-9412 Geothermal resource company that sells power to SoCal Edison	97.8	35.1	56.5	52.1	11.9	32—19	22	15	499
94 INTEGRATED CIRCUIT SYSTEMS (ICST) Norristown, Pa. 215-666-1900 Standard as well as tailor-made digital integrated circuits	18.3	2.7	21.8	101.4	15.1	18—7	12	19	54
95 PHP HEALTHCARE (PHPH) Alexandria, Va. 703-998-7808 Health care administration for the Army, Navy, prisons, and states	113.4	4.9	17.0	50.8	19.7	26—15	17	16	85
96 HEARTLAND EXPRESS (HTLD) Coralville, Iowa 319-645-2728 On the road again. Trucking outfit that hauls in the Midwest and the East	78.0	9.6	28.9	21.6	19.7	36—20	35	27	262
97 MEDSTAT SYSTEMS (MDST) Ann Arbor, Mich. 313-996-1180 It's got the info on health care: Software, research, and data bases	23.5	2.3	37.2	26.5	16.8	27—12	22	58	118
98 HOME NUTRITIONAL SVCS. (HNSI) Parsippany, N. J. 201-515-4900 It provides home infusion products and servicing	107.9	12.0	28.8	36.1	16.8	32—16	19	19	221
99 RESPIRONICS (RESP) Murrysville, Pa. 412-733-0200 It makes respirators and ventilators for hospitals	43.9	4.7	37.0	44.0	15.1	24—10	19	33	153
100 VITAL SIGNS (VITL) Totowa, N. J. 201-790-1330 ● Makers of supplies for critical care, anesthesia, and nuclear medicine	51.0	8.8	24.2	35.2	18.5	36—10	23	29	258

ALPHABETICAL INDEX OF COMPANIES

The number that follows each company name indicates its ranking in the table

AirTran 89 Allou Health & Beauty 48 American Biodyne 14 American Pacific 78 American Power Conv 12 American Medical Elect 56 Apple South 69 Artisoft 1 Astro-Med 88 Ballard Medical Prods. 34 BeautiControl 60 Benchmark Electronics 44 Bertucci's 54 BGS Systems 51 Boston Acoustics 86 Bridgford Foods 76 California Energy 81	Cambex 10 Checker Drive-In 11 Chipcom 33 Comco 36 Community Health Sys 35 Computer Network Tech 57 Danek Group 6 Easel 41 Environmental Elements 9 Envoy 66 Falcon Products 91 50-Off Stores 49 Heartland Express 96 Henley International 84 He-Ro 22 Home Nutritional Svcs 98 IMRS 28	Input/Output 61 Instatorm Mid-America 73 Integrated Circuit Sys 94 Jean Philippe 45 K-Swiss 52 Landauer 53 Lifetime Hoan 90 Lunar 18 LXE 92 Magma Power 93 Marcom 15 Marvel Entertainment 75 Matrix Service 58 Maxim Integrated Prods 83 Medstat Systems 97 Mens Laboratories 40 Micrografix 55	Micros Systems 82 Myers (L E) 38 National Rehabilitation 72 Nature's Sunshine Prods 77 Newpark Resources 63 North Atlantic Inds 71 O I 43 Outback Steakhouse 3 Outlook Graphics 64 Parametric Technology 8 PCA International 37 Pharmacy Mgmt 68 Photographic Sciences 85 PHP Healthcare 95 Platinum Technology 2 Progress Software 24 Proteon 80	Quantum Health 47 Rainbow Tech 59 Rally's 46 Respiriconics 99 Ross Cosmetics 87 Rotech Medical 67 Score Board 4 Seattle FilmWorks 42 Sequoia Systems 62 Sierra Semiconductor 30 Software Spectrum 21 Sonic 70 Southern Electronics 17 Spartan Motors 39 State Of The Art 16 Sullivan Dental Prods 27	Technology Solutions 5 Tecnol Medical Prods. 1 Transmedia Network 1 TRM Copy Centers 74 Tseng Laboratories 31 U. S. HomeCare 32 U. S. Robotics 19 Ultra Pac 23 Utah Medical Prods. 2 Valley Systems 50 Video Lottery Tech. 7 Vital Signs 100 Whole Foods Market 6 Xilinx 20 Xyplex 26 Zebra Technologies 21
---	---	--	--	---	--



LIBERTY MUTUAL LEADER IN WORKERS COMPENSATION SINCE 1936.

Liberty Mutual has been the leading writer of workers compensation for over 50 years.

It's a position we've earned by working with our customers on the issues that matter most: controlling workers compensation costs through innovative loss prevention and effective claims management.

COST REDUCTION THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is analyzing the causes of workplace injuries to improve occupational safety. For our customers, that research means Liberty's 750 local loss prevention specialists provide leading edge safety consultations, including ergonomics and customized safety programs.

COST CONTAINMENT THROUGH CLAIMS MANAGEMENT

When an employee is injured on the job, we apply unmatched experience to provide the most appropriate medical treatment, and return that person to work as soon as possible.

That's because managed care has been our strong suit for decades. We pioneered return to work programs. We have the only rehabilitation center of its kind in the industry. Our groundbreaking program of panel physicians was a forerunner of today's Preferred Provider Organizations (PPOs). Now LibertyPREFERRED CARE is one of the industry's most effective nationwide

PPO networks. Our medical cost containment programs saved our customers over \$170 million last year.

Fighting fraud through innovative programs, like special investigative units, is another important way we work to control costs.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As the industry's leader, we're working together with our customers and their trade associations, state legislators and labor in the fight for reform. And we'll keep working with them until workers compensation accomplishes its mission: helping injured workers return to work by assuring quality medical care and fast benefit payments.

At the same time, meeting the needs of our customers in difficult states requires innovative solutions. That's why we pioneered a large deductible policy. For self-insured employers, we expanded our Helmsman services with flexible plans.

THE DIRECT WRITING ADVANTAGE

Our leadership position demands a passion for service. As a direct writer, we can more readily provide the service customers need because partnership is built into the way we do business. By working together, we can more effectively control costs.



FACING THE ISSUES THAT FACE OUR CUSTOMERS

FIDELITY JUMPS FEET FIRST INTO THE FRAY

Expanded services and aggressive new marketing pit it against Citi, Pru, and Merrill Lynch

On a cool day in October, 1991, 50 top managers of Boston's Fidelity Investments gathered at a Cape Cod resort to consider an unsettling problem: After years of steady growth, Fidelity's retail business had plateaued at 6.2 million accounts. True, the booming stock market had boosted revenues, profits, and assets under management. But executives feared they were out of sync with small investors—their core market—a trend that could arrest future growth. Recalls Fidelity Chairman Edward C. Johnson 3rd: "We knew we were doing something wrong."

The outcome of that gathering has been a dramatic revamping of Fidelity's strategy. Historically, the company had focused on mutual funds. Now, it is moving toward serving all its customers' financial needs. Fidelity wants to become a vast clearinghouse that sells both its own and others' financial products, from credit cards to insurance. "We set a goal of being our customers' primary provider," says Roger T. Servison, president for retail marketing.

That will mean competing head-on with the likes of Citicorp, Prudential, and Merrill Lynch. Yet few financial-services companies are positioned as well as Fidelity. The largest mutual-fund company, with \$172 billion under management, it is also one of the biggest success stories in the industry. Last year, the private firm, best-known for its marketing savvy, posted record revenues of \$1.5 billion, up 16% from a year earlier, and record profits of \$90 million, up 182%. Because Fidelity is privately owned, those profits may be understated.

NEW TACK. The key to maintaining or even accelerating that growth, Johnson believes, is redefining Fidelity's relationship with its customers. Its 1980s tack was to sell to investors—mostly well-to-do individuals—who made their own financial decisions. But Johnson thinks that in the more uncertain 1990s, investors want more guidance. By helping them solve specific problems, such as how to save enough for retirement or education, he contends, Fidelity will win

more of their assets and handle more of their transactions. And it hopes to recruit more business from aging baby boomers with inherited wealth, an attractive new market for Fidelity.

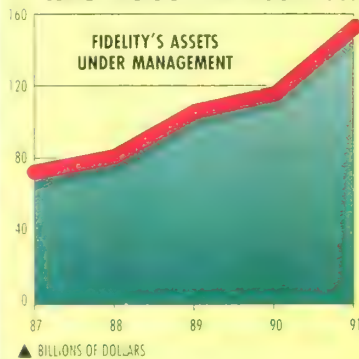
This shift has in turn required big changes in Fidelity's marketing approach. During the '80s, it stressed direct-marketing: large newspaper ads and 800 numbers. Now, it is adding a wide range of new marketing channels to reach a broader range of customers. It's expanding its network of brokerage offices—15 new ones are planned this year—to develop face-to-face contact with customers. Fidelity won't be providing detailed investment recommendations, just a bit more personal service and guidance than other mutual-fund companies now give. If customers want more detailed advice, Fidelity will refer them to a roster of affiliated financial planners, which it sees as a more popular alternative to brokers. Fidelity is betting that most investors don't like dealing with opinionated, hard-sell stockbrokers. "We're rewriting the rules for how financial services are marketed in the 1990s," says Servison.

But will the new strategy attract more customers? It's a risky, costly move that could amount to tinkering with a winning formula. In opening branches and giving advice, it could lose its distinctive image. And it's far from clear that Fidelity's strength in direct-marketing can be transformed into a successful campaign to steal significant market

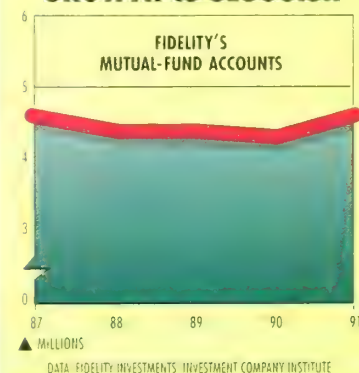
share from well-entrenched banks and brokerage houses. Moreover, Fidelity seems behind the curve on several of its plans. Charles Schwab & Co., for instance, has already signed up some 3,000 advisers and planners to sell its mutual funds, brokerage services, and asset management accounts.

DISCOUNT DRAW. But perhaps the largest potential drawback could be price. To pay for the added services, observers speculate, Fidelity will have to hike fees. With more price-conscious investors, Fidelity could end up losing customers to lower-cost competitors, which have recently been the big winners in mutual fund sales. "At some point, their customers are going to ask whether it's worth

A HOT STOCK MARKET HAS BOOSTED ASSETS...



...BUT ACCOUNT GROWTH IS SLUGGISH



DATA: FIDELITY INVESTMENTS; INVESTMENT COMPANY INSTITUTE

paying all that money just so Fidelity can bring more shareholders into their funds," says Vanguard Group of Investment Cos. Chairman John C. Bogle. Vanguard's retail-customer base has grown 46% between 1987 and 1990.

Johnson says brokerage-division profits—not just fund profits—will pay for much of the new strategy. And he bristles at Bogle's complaints that Fidelity's fees are too high. "That's undiluted bull," he snaps. "If you're sick, and you go to see three doctors, you don't pick out the one with the best price," he says. "We'll see who has the best performance [with its funds]." As a group, Fidelity's equity funds have performed better than other managers. Servison sees little risk in the new approach. "It's not as if we're Sears and have fallen out of the No. 1 slot," he says. "We think it's easier to change when times are going well."

Diversifying beyond mutual funds has been a longtime goal for Johnson. He launched a discount-brokerage operation in 1979. In 1986, he bought a bank that issues credit cards. The next year, he picked up a small insurance company.

But the idea never gathered much mo-



EASIER ACCESS: 15 NEW BROKERAGE OFFICES ARE PLANNED THIS YEAR

mentum. The reason was a debilitating feud between marketing executives and those running the brokerage division. Brokerage executives believed their division should be the engine of expansion. Fidelity's powerful marketers opposed a big increase in branches—with beefed-up advisory services and product lines—on the grounds that newspaper ads were the most cost-effective way of recruiting customers.

As a result, Fidelity's brokerage operation, No. 3 behind Schwab and Quick & Reilly Inc., failed to become a significant sales generator for the company. Although Fidelity's branches almost dou-

bled in number from 1987 to 1990, the increase had little impact on mutual-fund sales.

One of Fidelity's biggest disappointments was the Ultra Service Account, Fidelity's central asset account for mutual funds and brokerage, credit-card and checking accounts. Merrill's Cash Management Account and the SchwabOne account have been far more successful.

Some Fidelity executives blame Rodger A. Lawson, the former head of retail marketing and brokerage, for the slow progress. A longtime direct-marketing executive at Fidelity, he had little interest in selling through the branch network, they say. "He didn't understand the brokerage business," says David Carriseo, former president of Fidelity's brokerage services and now Citibank's global mutual-funds director. Lawson, who resigned last summer, denies he impeded growth. Starting in 1990, he says, the branches accounted for an increasing share of Fidelity's new retail business.

CALL FOR COUNSEL. To run retail marketing, Johnson recruited Servison, a strong marketer who had left Fidelity in 1990 after 14 years at the firm. To run brokerage, he promoted Gordon T. Watson, a veteran brokerage executive and former Merrill Lynch managing director.

The new approach will be readily apparent at Fidelity's branches later this year. Instead of rows of fund prospectuses, the service counters will be piled with brochures for retirement-planning and college-savings devices. Fidelity's phone operators, once mere order-takers, are being retrained to give recommendations. When Fidelity installs new workstations, they will have access to detailed customer and market information. Phone reps will be able to counsel customers on specific investment options tailored to their profiles, including Fidelity and non-Fidelity products, from mutual funds to insurance.

This is a facet of a much broader plan to target products and services more precisely to specific customers. So far, Fidelity's custom services have been aimed exclusively at its richest clients. Investors with at least \$100,000 can get a personal



CRITICS SAY INVESTORS WILL BALK AT HIGHER FEES. "UNDILUTED BULL," SAYS JOHNSON

PHOTO BY JEFFREY M. HARRIS FOR ENR; PHOTO BY JEFFREY M. HARRIS FOR ENR

adviser. Those with \$250,000 in Fidelity accounts can get premium services, such as faxes of account statements and overnight mail delivery of cash withdrawals.

But the major strategic push is bolstering its brokerage arm and broadening its nonfund services. To lure business from other brokers, Fidelity will soon initiate its own electronic stock trading system, called the Investor Liquidity Network. When possible, the ILN automatically matches buy and sell orders from its brokerage and fund operations and from outside institutional investors. The hoped-for result: cheaper executions. Says ILN designer Timothy F. McCarthy: "We know the technology works, and we think it has tremendous potential."

Fidelity plans to use a redesigned USA account as a vehicle to sell a variety of financial products to its customers. "Eventually, people will have one account for all their financial services," says Johnson. Fidelity plans to expand its credit-card operation by dropping the annual fee on its gold MasterCard to existing customers. It has only 154,000 credit cards outstanding, but that's up 70% from last year. And Fidelity is pushing insurance products. It had \$271 million in revenues from selling variable annuities last year.

HALF-EMPTY? To competitors, Fidelity's strategy is full of pitfalls—especially the possibility of higher costs and prices. Some Fidelity fees and loads are low, but others are close to industry averages. Its best-performing funds charge loads of 2% or 3%. Although Fidelity will make major pricing changes later this year, Johnson won't say whether prices will rise.

Brokerage competitors further question the effectiveness of relying heavily on a sales force of phone reps without a personal relationship with customers. Asks an executive at a Fidelity rival: "Can they really compete on a full-service basis without full-service people?"

Fidelity's Servison has an answer: "We will always demand that our clients take more responsibility for their personal finances than they have to with a full-service broker. We think, for the 1990s, that's a better place to be positioned than: 'Trust me, we'll do everything for you.'"

Servison has a lot riding on that assumption. Certainly, Fidelity's marketing instincts have been right in the past. In the view of many observers, it wrote the book on marketing mutual funds in the 1980s. But the book on marketing financial services in the 1990s will have a lot more authors than Fidelity.

By Geoffrey Smith in Boston, with Leah Nathans Spiro in New York

NED JOHNSON'S 20 YEARS OF INNOVATION



GOING HIS WAY: VOTING CONTROL OF OVER 78% SURE HELPS

Ned Johnson doesn't fit the stereotype of an aggressive, dynamic chief executive. Soft-spoken and reclusive, he rarely gives speeches. His senior staff often find him aloof, mysterious, and hard to decipher. His interests include Far Eastern philosophy and Chinese art.

But despite his unconventional style, Edward C. Johnson 3d has increased Fidelity Investment's assets under management by 21% a year for the 20 years he has headed the company. He delights in flouting popular business wisdom, and many observers attribute his success to his ability to come up with original ideas, such as check-writing on money-market funds and individual-sector funds. "He's a brilliant person and often the innovation leader in the industry," says Fidelity-watcher A. Michael Lipper of Lipper Analytical Securities Corp. Johnson encourages innovation among subordinates, to whom he cedes considerable autonomy.

Johnson backs good ideas with long-term investments. He stuck with Fidelity's discount-brokerage company even though it lost money for most of its first nine years. Now, it's the nation's third-largest discount broker.

CLOSED SHOP. One reason Johnson can do things his way is that he owns the company. He has 48% of Fidelity's privately held stock, worth more than \$1 billion, and voting control of over 78%. Employees hold the rest of the shares.

Johnson, 62, began at Fidelity as a portfolio manager, and he runs the company in much the same way he ran those early portfolios. His operations consist of 41 separate companies reflecting his varied interests, including an art gallery, a limousine service, and

Worth, a new investment magazine whose launch cost close to \$25 million.

"I look at things product by product, market by market, fund by fund, service by service," says Johnson. He was influenced by his father, a legendary mutual-fund manager. The elder Johnson, who started the company in 1943, was a student of Eastern philosophies, such as Zen Buddhism. His son has built Fidelity with Japanese-style vertical integration. Instead of farming out chores such as printing account statements, Fidelity handles them in-house.

Johnson's absolute control has a downside: Fidelity has a long history of losing top people, including many heirs apparent, such as then-investment guru Gerald Tsai and former Managing Director John F. O'Brien. O'Brien left in 1989 to become chief executive of insurer State Mutual Cos.

'TRADITION.' Johnson says he hopes that either his daughter Abby, 30, who manages Fidelity's Select Telecommunications fund, or his son Edward, 27, a college student, will "carry on a family tradition" and succeed him one day. And he has a succession plan on the table until they're ready: In the event of his demise, a special committee of family members, outsiders, and top executives would elect a new chairman from among four or five top Fidelity executives, whom he won't name. "Fidelity will remain intact, and it won't be run by committee," he says.

Johnson should be around for a while, though. He's in excellent health and is an avid tennis player and skier. Johnson's father didn't retire until he was 74. His son shows every sign of sticking around for at least that long.

By Geoffrey Smith in Boston

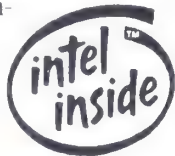
Introducing Z-NOTE. The future is built in.



320L \$2599 325L \$3099 325L \$3599 325L \$5299
Model 85 Model 120

Generations Ahead

While the others are busy imitating the SL-notebook design we shipped last July, Zenith Data Systems is thinking two generations ahead. Our new Z-NOTE brings a new genius to power management: *over four hours* of non-stop high-performance computing power. And our new "lid rest" feature allows you to close down without shutting down. It's simple, and it's just the beginning.



Notebooks Meet Networks.

The Z-NOTE introduces notebooks to networking. *Built-in* networking. Believe it. We've put Ethernet on the motherboard. And we've pre-installed client shells for Novell NetWare®, Microsoft® LAN Manager,™ and Banyan® VINES®. Take your pick.

We've Seen The Future And It's In Color.

Our new active-matrix color display is a knockout. And the real beauty of it is that you can start with our high-contrast black-on-white model and upgrade to color in the future. In minutes. It's worth waiting for.

320L		325L		325Lc
i386®SL-20 MHz		i386SL-25MHz		
60MB HDD		85 or 120MB		120MB
10.0" (9.5" v) VGA black-on-white display upgradeable to active-matrix color			8.4" VGA color	
5.9 lbs: *incl. nickel metal-hydrate battery			6.5 lbs:	
4 hours continuous power, max 10 hours under Z•NOTE Premier System Management.™ Expect about 1/3 less with color.				
ETHERNET NETWORK-READY Novell NetWare, Microsoft LAN Manager, and Banyan VINES client shells				
WINDOWS-READY MS-DOS® 5.0 with APM/Microsoft Windows 3.1 Logitech TrackMan Portable Mouse				
UPGRADE OPTIONS Memory, BIOS, HDD, FDD, Co-Processor, Display				

Who Needs A Docking Station?



Just snap on the optional, inexpensive READYDESK™ Port Replicator and you have instant access to all your office peripherals. It's pretty neat. It's Z-NOTE.

Practice Makes Perfect.

There's no more-thoroughly-thought-out SL notebook on the market. Microsoft Windows™ 3.1 is pre-installed. The Logitech® TrackMan® Portable Mouse is included. LCD/CRT video is simultaneous. And the optional data/fax modem works worldwide. You won't get that kind of thinking from the rookies. It's called Thinking Ahead. And we're used to it.

Call 1-800-523-9393.



MICROSOFT
WINDOWS™
READY-TO-RUN

Reseller prices may vary. But call ahead. We'll tell you how we can guarantee prices on all four models. When you're Thinking Ahead, you think of everything.



ZENITH DATA SYSTEMS

A Bull Company

Thinking Ahead.

Resellers determine their own pricing which may be higher or lower than Zenith Data Systems advertised prices. All prices and specifications are subject to change. Prices are for models shown, in U.S. dollars. Shipping, handling, and applicable sales taxes not included in the price.

Z-NOTE, READYDESK and Premier System Management are trademarks of Zenith Data Systems Corporation. Microsoft, LAN Manager, MS-DOS, Windows and the Ready-To-Run logo are trademarks of Microsoft Corporation. Logitech and TrackMan are trademarks of Logitech, Inc. The Intel Inside logo and i386 are trademarks of Intel Corporation. NetWare is a trademark of Novell, Inc. Banyan and VINES are trademarks of Banyan Systems, Inc. Copyright © 1992 Zenith Data Systems Corporation.

THE SEC WAVES AN AX AT MUTUAL-FUND FEES

The agency wants to cut charges by fostering price competition

For years, mutual-fund investors have been complaining to the Securities & Exchange Commission about big upfront charges when they buy funds, hidden expenses imposed on them while they own the fund, and surprise exit fees when they sell. Now, relief may be on the way. After its first comprehensive review of the 52-year-old laws governing mutual funds, the SEC is about to unveil a package of proposals that could lower the costs of investing in mutual funds.

The most critical part of the overhaul is to promote competition by deregulating the sales charges—called loads—set by fund sponsors on shares sold through brokers (table). Fund management companies such as Franklin, Putnam, and Templeton fix the load percentage, but most of the money goes to the brokerage firm that sells the funds to investors. The change, if approved by Congress, would allow investors to negotiate lower loads with their brokers.

MORE DICKERING. That could send tremors through the mutual-fund industry, where two-thirds of the assets are in load funds. Brokers that refuse to cut loads could see their business dry up. And fund management companies whose wares were pushed by brokers because of their fat commissions might find their sales evaporating, too. On the other hand, brokers willing to dicker could prosper as their sales soar. "Negotiated loads," says Jack White, president of Jack White & Co., a San Diego discount broker, "would allow no-load fund buyers to seriously consider buying load funds. That's not something they do right now."

One fund executive at a major brokerage house doubts there will be a mad rush by investors demanding discounts. "Clients can already buy no-load funds, but they choose to buy load funds through a broker," says Michael Scafati,

a vice-president at A.G. Edwards & Sons Inc. "Many need the advice and help of a broker." Then again, discount brokers such as Waterhouse Securities Inc. and Charles Schwab & Co. might fight for those investors by offering load funds for the standard fee on a stock transaction. That could work out to as little as 1% on a \$5,000 investment compared with as much as 8.5% now. "There are many top-performing load

The SEC proposals to increase price competition accelerate a trend already under way. A decade ago, nearly all broker-sold funds carried a steep 8.5% load. But competition from no-loads and investor resistance have driven loads down to an average of 5%. Funds can charge lesser amounts for larger investments—usually above \$10,000—but those fees must be published in the prospectus and no discounting is allowed.

GETTING TOUGH. But as loads have come down over the years, other fees have gone up—for which the SEC can partly blame itself. With the industry in a funk during the early 1980s, the SEC allowed fund sponsors to levy special charges on fund assets—known as "12(b)-1" fees—to pay for marketing expenses. Sponsors vowed that as their funds grew, the resulting economies of scale would allow them to reduce fees sharply.

That didn't happen. While the industry's assets soared six-fold over the last decade to \$1.5 trillion, fund sponsors kept more for themselves: According to Morningstar Inc., expenses for equity funds soared 41%, to 1% of assets, adjusted for the size of the funds. While loads fell, many funds quietly recouped some of the money by levying 12(b)-1 and "back-end" fees charged to investors who sell before a specified period.

Now, the SEC is getting tougher with those fees, too. The commissioners are expected sometime this summer to approve a separate proposal by the National Association of Securities Dealers that would limit annual 12(b)-1 fees to 0.75% of fund assets. Now, there's no cap at all. What's more, the proposal would begin counting 12(b)-1 fees as part of the maximum sales charge allowed. That would ensure that most investors don't pay more than 8.5% when all 12(b)-1, front-end, and exit fees are combined.

To be sure, there's no guarantee that the SEC's proposals will sail through Congress. "The lobbying from the mutual-fund industry and brokerage communities will be strong," promises Reginald E. Barnes, managing director for Memphis brokers Morgan Keegan & Co. But with small investors choking on the fees they're being charged, there will be plenty of grass roots pressure on lawmakers to follow the SEC's lead.

By Dean Foust in Washington, with Jeffrey M. Laderman in New York

REINING IN THE COST OF OWNING MUTUAL FUNDS

PROPOSED CHANGES:

SALES CHARGES

Permit investors to negotiate with brokers over the upfront sales charges, known as "loads"

DISTRIBUTION FEES

Cap the 12(b)-1 fee, which is a marketing charge paid from fund assets, at 0.75% annually

HYBRID FUNDS

Create a closed-end fund that allows investors to redeem their shares periodically at full net asset value

UNI-FEE FUNDS

Allow funds to consolidate all of the various fees—management, custodial, legal, etc.—under one unified charge

DATA: SEC, NASD, BW

funds that people would want to buy on a discounted basis," says Barbara Heinrich, a senior vice-president at Schwab.

Although brokers may take the biggest hits from price competition, managers of load-fund companies are not happy, either. Jon Fossel, chairman of the \$20 billion Oppenheimer Management Corp., says there's plenty of competition already. "You have no-loads and all kinds of loads," he says. He also questions how negotiated loads will help small investors. "Investors without clout will get hurt," says Fossel. "Deregulation could result in higher prices for some."

Negotiated loads would make waves in an industry where two-thirds of the assets are in broker-sold funds

If you multiply this by 30 billion,
you'll begin to understand
our commitment to the U.S.



Our consolidated balance sheet of more than \$30 billion in the United States indicates how serious Union Bank of Switzerland is about serving clients in this country.

So does the fact that we maintain a presence of 1500 professionals in five American cities. Making UBS a strong and growing force in areas as diverse as corporate and private banking. Commercial lending and securities trading. Foreign exchange and global asset management.

At UBS, we did not become one of the world's largest Triple-A rated financial institutions by taking our commitments lightly. But by drawing on our special strengths to meet specific needs of markets around the world.

Union Bank of Switzerland. An international bank that is very serious about business in the United States. Ours and yours.





IS TOKYO GETTING TOUGH—OR GETTING JEALOUS?

It cracks down on U.S. brokers—and their huge Japanese profits

The Tokyo stock market has plunged 50% since late 1989—a slaughter that has buffeted Japanese investors and brokers alike. But for the big U.S. firms in Tokyo—Salomon Brothers, Goldman Sachs, and Morgan Stanley—Japanese equities have been a source of rousing profits. By dint of program trading and a roster of other computer-driven strategies that rake in cash even when stocks decline, Wall Street firms have had a banner year in Japan.

In 1991, Salomon, Goldman Sachs, and Morgan Stanley dominated the list of the five most profitable brokers in Japan (table). By raking in \$176 million in the fiscal year ended Mar. 31, 1992—triple the prior year—Salomon was second only to Nomura Securities Co. in profits. But the trading-driven profit festivities may be about to cool.

Japanese regulators are taking steps that are making trading more difficult—and costly. The target is index arbitrage, a form of program trading that has troubled regulators on both sides of the Pacific as a possible source of market volatility. In index arbitrage, traders profit from price discrepancies between the price of index futures and underlying

“baskets” of stocks. Such discrepancies have largely vanished from the U.S. markets as index arbitrage has proliferated, but spreads are wider in Japan, where index arbitrage is shunned by all but the biggest local firms.

SCAPEGOATS? Tax authorities are pushing for a rule change that would allow them to collect a bigger chunk of the profits from index arbitrage. The proposal rankles U.S. brokers, because it would be collected retroactively. Officials may also redesign the popular Nikkei Stock Average into a capital-weighted index like Standard & Poor's 500-stock index. That would make it tougher

to put together a small basket of stocks that mimic the Nikkei's movements, thus making index arbitrage more costly. Meanwhile, the Osaka Stock Exchange, home of the Nikkei 225 index-futures contract, hiked commissions and margin requirements earlier this year to curb index arbs.

U.S. brokers privately complain that they are being used as scapegoats for the Tokyo market decline. The malaise has hurt local firms much more than U.S. firms, because the locals put far less emphasis on trading. Says one U.S. brokerage official: “What’s embarrassing is that we’re making good money by using well-accepted, legitimate trading techniques, whereas the Japanese firms are losing money.”

‘SIGNIFICANT BARRIER.’ This is not the first time action by regulators has hampered the growth of U.S. financial companies in Japan. When Citibank expressed interest in the branch network of a troubled savings and loan association in 1986, the Finance Ministry intervened and arranged for Sumitomo Bank Ltd. to take the bank over. Japanese officials are also slow in opening up the mutual-fund industry to foreign firms. The ministry is expected to ease restrictions on foreign mutual funds by cutting the minimum capitalization of a fund from \$8 million to \$2.5 million. But the minimum in the U.S. is still just \$100,000, and fund managers are free to determine their own fees, while they remain fixed in Japan. “There’s still a very significant barrier to entry,” says Fidelity Chief Counsel Robert Pozen. “It’s a far cry from an open market.”

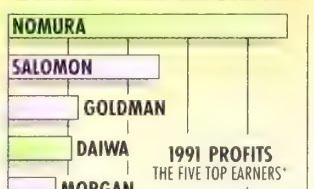
Japan may soon come under new pressure to loosen restrictions. The Riegle-Garn Fair Trade in Financial Services bill has cleared the Senate and is now being considered by the House (page 31). If made law, it would authorize U.S. regulators to block expansion plans by financial institutions based in countries that deny American firms opportunities equal to those enjoyed by local firms.

Fortunately for the American firms, Japan’s effort to restrict trading has met with little success so far. For example, much of the futures trading related to index arbitrage once conducted in Osaka has simply migrated to Singapore—where officials rejected a Japanese request to join Osaka in raising commissions.

U.S. brokerage officials are putting on a brave front. “Even if Japan Inc. tries to drum us out of business, it can’t do it,” says one U.S. executive. “Whatever they try to do, there will be a profitable niche for us.” But so long as Japan Inc. remains hostile, it cannot help but gnaw away at the Tokyo money machine.

By Ted Holden in Tokyo, with bureau reports

U.S. BROKERAGES STAND TALL IN JAPAN



REPORTED OPERATING PROFITS FROM ONGOING BUSINESSES FOR FISCAL YEAR ENDING MAR. 31, 1992 DATA: ASAHI SHIMBUN

S H A R P T H I N K I N G

AWARD-WINNING COPIERS THAT ARE #1 IN CUSTOMER SATISFACTION.

Today, customer satisfaction means more than productivity and reliability. It means cost-effectiveness. That's why you need Sharp Thinking.

Sharp Thinking created the high-speed, high-volume SD-2075 Master Series Copier/Duplicator. An advanced technology package that's winning industry and customer raves for excellence.

The SD-2075 does it all for less, giving you the most-wanted features as standard. It produces high-quality documents at 75 copies per minute, and masters the largest, most complex jobs — sorting, finishing, computer fanfolds, report covers and much more. That's Sharp Thinking.

It's behind every Sharp copier. So if you're looking for high value in a high-volume copier, start thinking Sharp. For more information call:

1-800-UE-SHARP



SHARP
FROM SHARP MINDS
COME SHARP PRODUCTS™

© 1992 Sharp Electronics Corporation.

BANKING SYSTEMS • CALCULATORS • CASH REGISTERS • COLOR SCANNERS • COMPUTERS • COPIERS • FACSIMILE • LASER PRINTERS • TYPEWRITERS • WIZARD • ORGANIZERS

[illegible]

68-871
JAMES G. HARRIS
HARRIS, JAMES G.
2 PK
MAY 1963
D.E. CRYSTAL GROUP
240000
M. A. HARRIS



If an image is worth a thousand words, imagine what imaging is worth to you.

Your strategic picture. Like the strategic pictures of businesses and governments around the world, it's what Unisys had in mind when we designed our InfoImage family of imaging solutions.

The benefits go beyond reductions in paperwork. Beyond protecting the integrity of originals. Even beyond savings from enhanced productivity. For InfoImage solutions not only help you process applications quicker, handle claims more efficiently, and respond to customers faster. They also help you create marketable, revenue-generating new services.

Whatever your business and whatever it's built on—checks or claims, correspondence or blueprints or signed authorizations—our imaging solutions enable you to capture documents electronically. You can move them throughout your enterprise, gain simultaneous access to them, and put them to work growing your business.

As a leader in imaging, we know that truly advanced solutions do not consist of technology for

UNISYS
We make it happen.

technology's sake. Beginning with a careful understanding of the customer's needs, we apply imaging technology to reflect the unique flow of information within an organization. And our InfoImage Professional Services recognize that an imaging solution isn't a solution unless it's integrated into the customer's existing systems.

Whether you're in finance, government, travel, telecommunications or any other service industry, call us at 1-800-448-1424, ext. 139. Ask how our imaging solutions can help improve your business picture today.

[illegible]

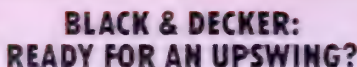
WHAT WILL KEEP POWERING BLACK & DECKER

Since it took a long time to get the word out, it's not surprising that the company's intended push to sell the car just is getting off. The company itself estimates that 20 to 30 percent of the car buyers are still in the beginning of a home-ownership cycle, and 20 percent of the car buyers are still in the beginning of a home-ownership cycle. The company's sales are still in the beginning of a home-ownership cycle.

[illegible]

placed with the other women in the group. The women who had been in the group for the longest time (12 years) had the lowest mean score (4.0) and the lowest mean age (39.5 years). The women who had been in the group for the shortest time (2 years) had the highest mean score (5.0) and the highest mean age (45.5 years). The women who had been in the group for the longest time (12 years) had the lowest mean score (4.0) and the lowest mean age (39.5 years). The women who had been in the group for the shortest time (2 years) had the highest mean score (5.0) and the highest mean age (45.5 years).

GOOD OLD DAYS.



Glenn & Twicken Chairman and CEO Nigel Armstrong is a recent meeting with a group of potential managers and was told, "Armstrong said you had asked them not to bid \$100 million because—[one of Glenn & Twicken's] huge expenses. House Loans would jump to \$200 million in the next few years. A House Loans investment would be the problem in it, the biggest."

A LAND PLAY IN ISRAEL?

When the world of business is in a state of flux, it's not hard to see why you might want to take a break. But when you're in a state of flux, it's not hard to see why you might want to take a break. But when you're in a state of flux, it's not hard to see why you might want to take a break.

One of them is a young, beautiful, slender, blonde, freckled, very pretty, but unknown, "little person" who is working for the Montgomery Ward's Flower Market. Found in San Francisco, "little" lived in one of the most attractive and picturesque, compact, in long and narrow houses. It has two stories in the main structure, the extension of the

Site Robert M. Kimmick Sr. 77, president of Modern Media Publishing, which owns the Modern newspaper, Joplin, Mo., also served as insurance company and is of the construction business, with investments valued at \$40 million in real estate, and is for new investments.

Diener says that in both 4 years, and more generally, she figures that the company, which earned 10 per cent in 1991, will be in the red this year because of costs associated with the Miami operations. But she does not let that stop her. "I will continue to earn \$1.7 million this year and more without earnings in 1994 and 1995," Diener figures the company's first losses alone are worth about \$20 per share.

HELPING HANDS, HEALTHY PROFITS

Morgan's Group has been a big winner for the 41st Colman. He took the quantity of housing loans, particularly long-term, and maintained very long-term floating rates in 1991 with a interest rate of 34 basis. In 1990, it was around 30 basis for 30% loans. The company tried to use up to 100 basis in 1991, but got 34 basis. He took a gain again last year for a net \$14 million.

Medicare pay rates of profitable under-
performers, who were often bigger sales
and earnings over the next two years.
His goal: to raise revenues from \$100
million to \$400 million by 1994. How?
By doubling or tripling over-trading
hospitals and turning them into profitable
units for long-term, sustainable growth
and expanding facilities for short-term
value patients, such as drug addicts
mean. (Just that will make Medicare
a, around the Street a savings under-
take, very common. Investors will
have earnings for 1992 at \$1.20 a share
and \$1.75 for 1993.

Trailing in the Big Board at 15, the stock is down from \$10 just two months ago. Behind the decline is widespread criticism about alleged abuse on the part of the director of quality care for nursing management company, Robert Peter John of the BigWest Investment Holding Group. Since January, his actions as executive have been severely faulted, earning performance. Many managers of investors of Water Investments in Chicago say. Motivated by a potential legal battle over money, they say, "He's not interested," based on a earnings potential, he figures that it is worth up to \$100 million.

DOES YOUR INVESTMENT BANKER SHARE YOUR VISION?

Seeing is believing.

And believing in your investment banker means seeing results. Not just from time to time. But time and time again.

Furman Selz gets results by sharing your vision. From concept to closing. Is this the right time to tap into the capital markets? Would it be wise to consider an acquisition? Furman Selz has the expertise you need to make the big decisions. And the clout to make things happen.

From the media business to automotive, from healthcare to shipping, Furman Selz has earned a reputation as an outstanding investment banker. It's a Xerox Financial Services Company with a long-term commitment to your success.

And that's a smart way to do business.

No matter how you look at it.

If you'd like to find out how we can improve the outlook of your business, write Furman Selz, 230 Park Avenue, New York, NY 10169.

XEROX
FINANCIAL SERVICES

XEROX® is a trademark of XEROX CORPORATION.



Furman Selz

NO OFF-THE-RACK SOLUTIONS HERE

Turning around The Limited's two big divisions, fast, is a tall order

Howard Gross had no doubts about his mandate when he took over as president of Limited Stores Inc. in January, 1991. "Do whatever the hell you have to do," said The Limited CEO and founder Leslie H. Wexner. Gross isn't the only Limited division head with a turnaround to pull off. At Lerner New York, Barry Aved got similar orders when he took over as president in February, 1992. "Fix it," said Wexner.

Both Aved and Gross have difficult jobs ahead of them. The flagship chains they command are huge, and the problems they've inherited are already several years old. With almost 1,700 stores between them, Lerner and Limited Stores did roughly \$2.3 billion in sales last year, 37% of the parent company's total. But they contributed just 29% of The Limited Inc.'s profits, according to Richard Baum, a retail analyst at Sanford C. Bernstein & Co. in New York. And though the company's sales rose 17%, to \$6.1 billion, in 1991, operating profit crept up just 2.1%, to \$713 million, largely because of lackluster results at the Lerner and Limited divisions. Earnings for the quarter ended May 2 were up a scant 1%, news that sent The Limited's stock tumbling three points, to 21 on May 12.

GRUMBLING. To make matters worse, Wexner has been promising a turnaround at these divisions for almost two years. Sixteen months ago, Limited Stores President Verna Gibson abruptly left and was replaced by Gross, who had shepherded Victoria's Secret Stores, The Limited's lingerie division, through five years of phenomenal growth. The same month, Aved was hired as a general merchandise manag-

er at Lerner as a backup for President Robert Grayson, whose strength was in store operations. Grayson left last February, and Aved was named president.

It's not clear that a dramatic improvement at either chain is imminent. In early May, the company told analysts that sales at stores open a year or more were down at Lerner and Limited Stores for the first quarter of 1992, ended May 2.



SPRUCING UP THE LIMITED

Strategies of the major store chains run by The Limited Inc.

LIMITED STORES Est. 1992 sales: \$1.3 billion. A confusing fashion message alienated core shoppers and sent same-store sales down 5% in both 1990 and 1991. Attempted solution: A new upscale look and better quality

LERNER NEW YORK Est. 1992 sales: \$1.2 billion. At 9.3%, margins remain far below those at sister chains. Its traditional budget customers shop elsewhere now. Strategy is to move upscale

EXPRESS Est. 1992 sales: \$1.3 billion. On-target fashion boosted same-store sales 12.5% in 1991. Continued expansion planned

VICTORIA'S SECRET STORES Est. 1992 sales: \$950 million. Margins are fat at 18.4%. But same-store sales rose just 5% in 1991 after four years of double-digit growth. Strategy is to branch out into fragrance and toiletries

DATA: SANFORD C. BERNSTEIN & CO., COMPANY REPORTS

"Very disappointing," grumbles one institutional investor, who proceeded to dump a chunk of his Limited stock. Investors and analysts are so fed up they plan to grill Gross, Aved, and Wexner at The Limited's annual shareholders' meeting on May 18. "They led people to believe the Limited turnaround would happen by fall," says Dave Gilson, retail analyst at IDS Financial Services Inc., which owns 1.6 million shares. "To the degree that they're making promises this year, they better be able to deliver."

Gross promises he can fix Limited Stores but says he'll need time. In his first year in charge, sales in stores open a year or more fell 5%, and profits tumbled 56%, to \$102 million on total sales of \$1.2 billion, Baum says. The 772-store chain once thrived by catering to fashion-hungry women who were satisfied with what Gross calls "throwaway" clothes. But it got pinched as shoppers grew value-conscious. At the same time, a sister chain, the 617-store Express, has lured many younger Limited customers with more cutting-edge looks.

Now, Gross is working to boost Limited's quality. And to differentiate it from Express, he's trying to establish his chain as a haven for more affluent, older women who are looking for clothes for work as well as play. He fired 70% of Gibson's merchandising team, hired top merchants from Saks Fifth Avenue and R.H. Macy & Co., and set about finding factories in Italy and the Orient that manufactured clothes for such upscale designers as Donna Karan and Liz Claiborne. For the first time, says Gross, Limited stores are stocking linen. "I'm embarrassed to admit it but we'd never had it. We thought the customer wouldn't understand it because it was too good."

Gross's efforts may now be paying off. Christina Lovera, 49, is a New York attorney who shops at Bergdorf Goodman. She noticed a difference while on a recent visit to a Limited store with her 16-year-old daughter. "Today, I discovered things that were my age," she says. "I'll come back here and buy casual things." Says Gross: "We've improved about

Appointment Book 05-31-92 1:23 PM
Thru: abt Call: V

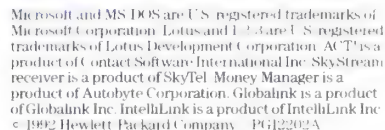
Tuesday June 2nd, 1992

Global Pricing Review

Lunch with Hans Martin

Call Barbara with update

Copy Paste Note Insert Tools
Help Cut Copy Find Patch



This ad is the only sales pressure you'll ever get from Fidelity Brokerage.

Tired of high-pressure, full-cost brokers? Now you can trade for yourself... without the hard sell. And save up to 65% on stock and option commissions!¹

A Wide Range of Investment Choices

Fidelity Brokerage offers a full range of investments including more than 1000 mutual funds like Fidelity Magellan Fund and other leading fund families such as Janus, Kemper, and Franklin.²

Invest With The Strength of Fidelity

As one of the nation's largest investment companies, Fidelity has the resources and expertise to help you invest with confidence. And our registered representatives are available 24 hours a day to assist you.

So if you're tired of the sales pressure, get your **FREE Fidelity Brokerage or IRA Fact Kit.**

Visit your local Investor Center or call 24 hours.

1-800-544-7272



1. \$100,000 based on 1991 Fidelity Brokerage Services, Inc. (FBS) data. Minimum commission is \$5. For more information, including charges, expenses, and applicable sales charges, call or write for a free prospectus. 2. Fidelity Investments is a registered trademark of FMR Corp., the parent of the affiliated Fidelity companies. CODE: BW PLU 052592

Marketing

...and we're only halfway there.

Unlike Limited, Lerner must add a strong franchise in years, and that means Aved's job will be tougher. Lerner, a chain of moderately priced women's apparel stores bought by The Limited in 1985, now has 914 outlets and is the company's largest chain in square footage. Although Lerner managed to rack up \$1 billion in annual sales by the end of 1991, it never captured a loyal following of budget-conscious shoppers who looked for bargains at discount outlets and mass-merchants such as Wal-Mart.

The result: Lerner's 1991 operating margins were 9.3%—much slimmer than those at The Limited's other divisions—and its sales per square foot were significantly lower. Faintly, Lerner did \$198 in sales per square foot last year, vs. \$398 at Express. The Limited's most profitable division.

Now, Aved is working to drive away the customer Lerner tried so hard to court, and aiming for women with more money to spend. "There's a select group I'm trying to lose as fast as I can," says Aved. To do that, he's raising prices and filling racks with more expensive, better-made clothing. Aved says he's even started shopping in Italy for fabric. And he's unabashedly knocking off such designers as Donna Karan, while getting rid of lower-priced basics like hosiery and socks.

A NEW CROWD. So far, so good. Lerner same-store sales rose 2.5%, and total profits increased 10% to \$117 million during Aved's first year at the chain. But like Gross, he doesn't expect strong sales until the fall. In the meantime, there's at least one sign that Aved's repositioning may be taking hold. Hundreds of items made of "crepon"—a rayon fabric that looks like crepe and so out last summer—aren't moving this year. How come? "We've got a better customer in the store, and she's telling me that even the best of what we had last summer doesn't cut it this year."

To keep the new customers coming, analysts say Lerner needs to advertise aggressively. "You have to take the stigma away from shopping at Lerner and reeducate people so they're happy to carry a Lerner bag," says Jeanne Mockaitis, an analyst at Putnam Cos. Inc., owner of 1.6 million Limited shares.

As both division heads move the chains upscale, there's the risk that they'll be chasing the same customers. Small wonder, then, that Gross and Aved say they're more competitors than colleagues. But given the urgent marketing orders they got from Wexner, neither has any time for pleasantries.

By David J. Reardon

Bundle up with an Everex 486/33.



For a limited time save a bundle at \$2,999.

Everex™ has never made an offer like this before. A complete, fully configured upgradeable Tempo M™ Series i486™ DX computer system with all the capacity and performance you could ever want. All you do is plug it in and use it.

It's that simple. We loaded it up and priced it right so you get the most for your money. Take a look at the extras you get for only \$2,999!



- 120MB Hard Drive
- Everex Color/ SVGA Monitor with a 28mm Dot Pitch
- 4MB RAM (expandable to 32MB)
- Dual 3.5" and 5.25" Floppy Drives
- MS-DOS® 5.0 (preinstalled)
- Microsoft® Windows™ 3.1 (preinstalled)
- Standard 101-key Keyboard
- Microsoft®-compatible Everex Mouse
- Everex Mouse Pad
- Free 3-Month On-Site Service Warranty
- Free One-Year Parts and Labor Warranty

(Both warranties extendable to three years)

FOR ADDITIONAL INFORMATION

or the Everex reseller nearest you, call.

1-800-262-3839

Don't wait. Contact your local Everex reseller now! They're ready to work with you to take advantage of this limited time offer. You won't find an offer this good from any mail order supplier.

Call today and get one of the most popular and reliable PCs on the market — as well as the complete support and service that only Everex can supply.



Connecting Point™

COMPUTER CENTERS

ENTRE

Intelligent Electronics

MicroAge
Computer Centers

TCBC

CompuCom Systems

Promotion good through 6/30/92. Suggested retail price, subject to change without notice. © 1992 Everex Systems, Inc. All rights reserved. EVER for EXcellence is a registered trademark, and Everex, Tempo, and Tempo M are trademarks of Everex Systems, Inc. The Intel Inside logo and i486 are trademarks of Intel Corporation. Other company and product names are the registered trademarks of their respective holders.

APPLE'S DARING LEAP INTO THE ALL-DIGITAL FUTURE

Personal electronic gizmos will be just the start as John Sculley outgrows Macs in a big way



SCULLEY AND SPINDLER: FEWER TABOOS IN THE PUSH FOR NEW PRODUCTS

Apple Computer Inc. Chairman John Sculley has a knack for vivid imagery. His latest: For personal-computer makers, "the 1990s are a cold shower." After a decade of 30% and 40% annual gains in shipments, growth has slowed to a 7% annual stroll. Instead of awaiting the next sales boon from some whizzy new technology, most PC makers are trying to streamline quickly enough to turn a profit next quarter.

Apple has been more successful than

most at figuring out how to prosper in this environment. It has slashed costs and, thanks to a series of hot-selling Macintoshes, has increased market share while maintaining profits, despite far lower retail prices. Still, Sculley says Apple's future will be severely limited unless it moves beyond personal computers. "I was concerned Apple didn't have a sustainable business in the '90s that was very exciting," he says. "We would still be around, but nobody would care."

The solution? Apple isn't going to be just a personal-computer maker. Sixteen years after helping to pioneer the industry, Apple plans to move beyond it—to become a global electronics holding company overseeing multiple businesses. Sculley's vision for 2000 and beyond is of a vast market taking shape as all sorts of information is converted into digital form. Everything from high-definition TV pictures to local phone calls will be reduced to the zeros and ones that computers already use. Sculley is betting that when that happens, several industries will converge into a \$3 trillion megamarket (chart, page 122). His goal is to grab an early lead by using Apple's renowned ability to paint a user-friendly face on complex digital machines.

SNEAK PREVIEW. Sculley says the company will build and sell consumer electronics, all sorts of software, telecommunications devices, and, oh yes, computers. As computer technology invades everything from TVs to electronic newspapers, the list may grow. "We won't get into main frames or PBXs, and we won't print telephone books," says Chief Operating Officer Michael H. Spindler. "From there on, everything is possible."

The first machine to test Sculley's new strategy will make its debut on May 29 at the summer Consumer Electronics Show in Chicago. Apple will use this sprawling showcase to take the wraps off a gadget code-named Newton (page 122). At its most basic, it's an electronic Filofax that helps track appointments, phone numbers, and addresses. It's a bit like Sharp Electronics Corp.'s Wizard. But it also recognizes hand printing, has a built-in fax and data modem, and runs faster than any handheld organizer.

The product won't be on store shelves until January, 1993, and analysts don't expect significant sales until the mid-1990s. But it's the start of the new Apple that Sculley says will include not only consumer electronics but digital communications. Telecommunications, he predicts, will be as important to Apple in the 1990s as the Mac's graphics technology was in the 1980s.

To prepare, Apple is undergoing what Sculley calls the most important transformation in its history. Sculley and Spindler are moving Apple from a one-product company with a simple distribution system to a multibusiness conglomerate that will sell new types of products through new channels to new customers. Some of these businesses, such as consumer electronics, have radically different cost structures and product cycles than Apple is used to. To manage the change, Apple has broken itself into new divisions (table), subsidiaries, and joint ventures. Each has been told to think and act like an independent company, hungry for sales and profits.

Lawrence Tesler, vice-president of the Advanced Products group, is known around Apple as the father of Newton. David Nagel is acting general manager of the new division launching it. To share the costs of development, Apple in the past year has forged partnerships with former rival IBM as well as with two Japanese technology giants: Sharp, which will build the Newton, and Sony Corp., which now builds some of Apple's PowerBook portable Macintoshes.

Sculley is also busy courting potential partners in Japan and Hollywood. In Tinseltown, Sculley says he is building relationships with entertainment, media, and publishing companies that have programming for Apple's new gadgets. These industries are going to bump into each other, so it's important to start building relationships today," he says. One example is Apple's recent deal with Random House to put an electronic version of the Modern Library books on PowerBook portables.

Handling all this will be tricky for a company with Apple's history of whip-lash changes in management and strategy. Since 1985, when Sculley threw out co-founder Steven P. Jobs, the company seems to have a new strategy with each new year. "Over time, they haven't really managed their business well," says analyst Michele Preston of Cowen & Co., "although they have in the past two years."

Many in the industry applaud Apple's vision but remain unconvinced that the company can carry it out. "Apple might be getting too scattered," says Reese M. Jones, president of Farallon Computing Inc.,



TESLER AND NAGEL: VENTURING BEYOND PCs INTO UNCHARTED MARKETS

which makes networking software. "It's a very difficult strategy," says Bernard R. Gifford, an Apple vice-president who left in March to start a software company. "But I don't see an alternative."

Nor does Sculley. He got his wake-up call in 1990 when Apple's strategy of charging top dollar for Macintoshes began to unravel. The Mac's easy-to-use graphics were no longer unique, and customers balked at paying Apple prices. The long-term trend in PCs became clear: less differentiation, lower margins, and slower growth.

Sculley quickly cleared out top management, bringing in Spindler, the former head of Apple Europe, to run day-to-day operations. The CEO took over research and development and turned up the heat. In October, 1990, the

A NEW CORPORATE STRUCTURE

To prepare for markets beyond computers, Apple has replaced its traditional organization by geographic area to give profit-and-loss responsibility to functional groups. Here's how they're set up:

MACINTOSH HARDWARE DIVISION

GENERAL MANAGER: FRED FORSYTH Develops Macintosh desktop and portable computers as well as printers and scanners

MACINTOSH SOFTWARE ARCHITECTURE DIVISION

GENERAL MANAGER: ROGER HEINEN Develops operating systems and related software for all product divisions

ENTERPRISE SYSTEMS DIVISION

GENERAL MANAGER: MORRIS TARADALSKY Develops systems such as Macintosh Quadras for corporate computing networks

PERSONAL INTERACTIVE ELECTRONICS

ACTING GENERAL MANAGER: DAVID NAGEL Developing a new line of portable information gadgets

low-cost Macintosh Classic and LC arrived and were instant hits. In October, 1991, they were followed by the PowerBook notebooks, also hits.

Lower prices fueled record shipments. Desktop Macs now account for 19% of PCs sold through U.S. computer dealers, up from 11% in 1990, according to StoreBoard Channel Tracking. In notebooks, Apple has gone from nowhere to a 21% market share—second only to Compaq Computer Corp.—in just two quarters. In fiscal 1991, ended Sept. 30, revenues climbed 14%, to \$6.3 billion. But a \$224 million charge for restructuring and laying off 1,500 employees cut profits by 35%, to \$309.8 million. Now, the lower cost structure is paying off: In the March quarter, Apple profits increased 3%, to \$135.1 million, on a 7% revenue gain, to \$1.7 billion.

KILLERS ALL. With the payoff from such products as Newton far off, Apple still needs growth from existing products. So the Mac Hardware Div. must churn out more hit Macs—and do so faster while keeping costs down. The goal: In 1993, new products are due every six months instead of once a year, says General Manager G. Fred Forsyth. This fall comes a Classic with a CD-ROM drive, followed by a color Classic next year.

To keep up that pace, Forsyth has broken his division into small units, each with its own budget. For the first time, engineers weigh in on business decisions, helping analyze what products to tackle or abandon. "They actually kill their own products now," Forsyth says.

To get the most out of the slowing PC market,

Apple has also lifted some old taboos, such as the one against selling Apple technology for IBM-compatible PCs. Last month, it began shipping laser printers and scanners that work with PC clones. It's even writing software for Microsoft Corp.'s Windows, the graphics "environment" over which Apple is fighting a bitter copyright-infringement suit. A Windows version of the Mac's QuickTime video software is due out any day. The company is already rewriting parts of the Mac software for other computers and is weighing the risks of doing so for IBM-compatible PCs.

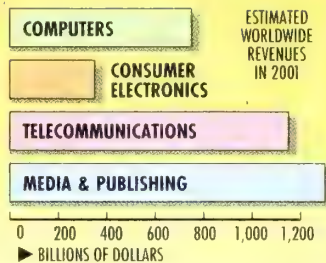
All this has Wall Street smiling. Sales of printers and scanners

for IBM PCs and clones may generate \$200 million in sales, and selling Mac software for other computers could add \$100 million, says analyst Charles Wolf of First Boston Corp. That's not huge, but software is highly profitable—80% gross margins, vs. 44% for Macintoshes. Analysts now expect Apple revenues to jump 16% this fiscal year, to \$7.3 billion. Similar growth is expected in 1993.

But even the most bullish Wall Street analysts aren't ready to predict how things will shape up in 1994, when Sculley's new strategy will start to play out.

2001: AN INFORMATION ODYSSEY

To Apple CEO John Sculley, computers are just one segment of what he sees as a new market of overlapping products. He wants Apple to get a piece of all these segments:



DATA: APPLE COMPUTER INC.

Analysts were enthusiastic about the Newton when Sculley and Spindler showed off a prototype on May 6. They estimate that Apple will sell 250,000 Newtons in 1993, generating just \$125 million, but predict that "personal elec-

tronics" sales could double in 1994, when Apple adds more handheld gadgets. "The issue is execution," says Bruce Lupatkin of Hambrecht & Quist Inc. "Apple has wonderful opportunities. They have only themselves to blame if they fail."

Nobody knows that better than Sculley. He describes his ambitious plan as a leap from "the sandbox to the beach." If he fails, Apple's future will be circumscribed by the limits of the personal-computer market. And the 1990s will remain a long, cold shower.

By Kathy Rebello in Cupertino, Calif.

APPLE'S NEWTON: THE START OF SOMETHING BIG?

John Sculley is the CEO of the world's No. 2 personal-computer maker. But he confesses to being "a fax junkie." He has six of them—at the office, at his home in Woodside, Calif., at his summer retreat in Maine, even aboard his 50-foot yacht.

It was in the throes of his fax fixation that Sculley began to think about how simple and easy these machines are to use. Why not a pocket fax?

That was four years ago. Now, that idea has blossomed into Apple Computer Inc.'s first entry into the \$33 billion consumer-electronics market. Apple is not talking much about the product prior to launching it on May 29, but details are leaking: Code-named Newton, this book-size device—six inches by eight inches—goes far beyond Sculley's original notion. Those who have seen it call it a "Sharp Wizard on steroids." No wonder: Sharp Electronics Corp. is designing the miniaturized hardware and providing key liquid-crystal display (LCD) technology. Sharp will build Newtons in Japan for Apple and has a license to use Apple software in its own Newton-like machines.

RUSTLING PAPER. The whole Newton package, says an insider, is "cool," but the sophisticated software is what stands out. There's no keyboard because, like other pen-based computers, Newton is programmed to recognize handwritten printing. It can also capture a digital "snapshot" of your writing, including sketches, which then can be transmitted like a fax page.

But Newton's most impressive programming makes it an "intelligent assistant." It understands certain key

words so you can, for example, dash off a memo and dispatch it by simply printing on top: "Fax John Sculley." Done. And data from the office can be whisked to Newton anywhere, via a cellular modem. Apple adds some nice human touches, too: As you flip through the electronic address book, you hear pages turning.

Sounds good—especially in a world of clone computers and tired consumer gizmos. "It's the most exciting product I've seen in eight years," says one Silicon Valley analyst who previewed it.

But Newton is just a prototype now. A lot could change before shipment in January—including the price. Apple only says it will be under \$1,000, but

insiders say the target is \$700. And by next winter, there may be more competition. Casio Computer Ltd., whose Boss line pioneered the electronic-organizer market, is planning a souped-up model for just \$299. And Hewlett-Packard Co. is adding handwriting-recognition to its popular \$700 95LX "palm-top" PC. That's expected by February, giving Apple only a month's headstart over a seasoned competitor.

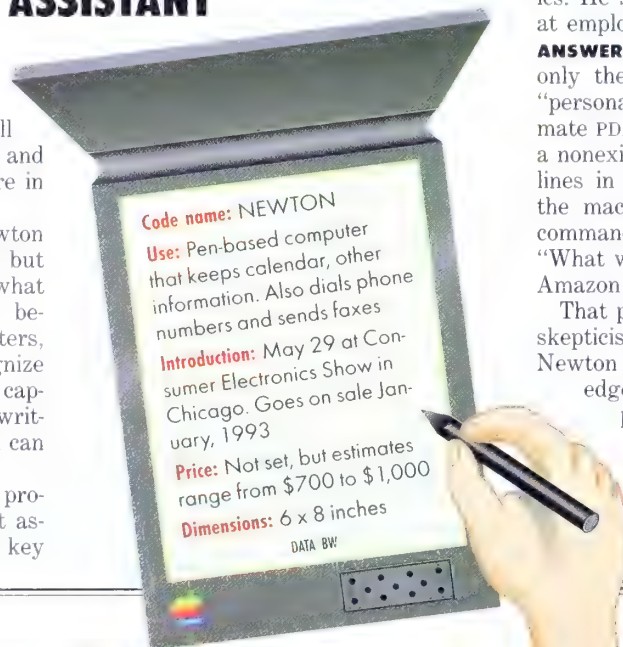
Apple appreciates the difficulty. That's why it's passing off manufacturing to Sharp and using Sharp's connections to help get Newton into such consumer-electronics retailers as Best Buy Co. and Circuit City Stores Inc. Internally, Apple Chief Financial Officer Joseph A. Graziano is slashing costs so earnings won't get creamed when Apple enters consumer electronics. He says he has even raised prices at employee cafeterias.

ANSWER BOX. Sculley says Newton is only the first in a planned series of "personal digital assistants." The ultimate PDA is the Knowledge Navigator, a nonexistent product that Sculley outlines in a clever animated film. In it, the machine responds to any spoken command, from "Call my mother" to "What was the average rainfall in the Amazon Basin for the last 10 years?"

That pie-in-the-sky hype has inspired skepticism and some ridicule. But if Newton delivers just a bit of Knowledge Navigator's capabilities, Apple could really start something in consumer electronics. If not, it's back to the fax machines for Sculley.

By Kathy Rebello in Cupertino, Calif.

APPLE'S ELECTRONIC ASSISTANT



... I PLEDGE TO MAKE THE EARTH A SECURE AND HOSPITABLE HOME
FOR PRESENT AND FUTURE GENERATIONS "



The Earth Pledge poster, entitled "Last Turn, Your Turn", measures 25" X 26" and is printed on recycled 80 lb. cover textured art stock.

LAST DECEMBER, AN URGENT PLEDGE TO SAVE THE PLANET WAS LAUNCHED BY THE EARTH SUMMIT '92 — OFFICIALLY KNOWN AS THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED). THIS UNIVERSAL CALL PRECEDES THE UPCOMING EARTH SUMMIT, WHERE 174 WORLD LEADERS WILL MEET IN RIO DE JANEIRO THIS JUNE TO DISCUSS HOW TO HALT THE MOUNTING DEGRADATION OF THE EARTH'S LAND, SEA AND AIR, AND ADVANCE ECONOMIC GROWTH THROUGH SUSTAINABLE DEVELOPMENT.

The official poster to promote the Earth Pledge has been created by renowned artist Robert Rauschenberg, and donated by the Robert Rauschenberg Foundation. It can be yours for only \$19 if you act quickly by calling the toll-free number below. Soon to be a collector's item, this beautiful expression of support for this important summit will mean so much more when you make it your own. Call 1-800-528-3400 and order

your Earth Summit '92 posters today! Or write the Earth Summit Pledge, specify the number of posters you want with an enclosed check for the appropriate amount (include \$3.00 for shipping and handling per order), and send it with your name and the address to: Ivy Hill Corp., 4800 So. Santa Fe Ave., Los Angeles, California 90058. Att: Fulfillment Dept. Make check payable to the Earth Summit Pledge. Allow 4-6 weeks for delivery.



EARTH SUMMIT '92

Let's all put our hands together
Take "The Pledge" today.



FEDEX: EUROPE NEARLY KILLED THE MESSENGER

After big losses there, it makes a strategic retreat

There was a time when the name Federal Express was not only synonymous with the express mail business—it was the express mail business. Even after a flock of imitators began offering “next day delivery,” and fax machines became ubiquitous, Memphis-based Federal Express Corp. kept on growing.

But these days, founder and CEO Fredrick W. Smith is finding that the industry he created 19 years ago is changing faster than he can say “overnight.” After nearly two decades of building a reputation based on service, FedEx now is streetfighting with its competitors on price. And that means cutting costs at the traditionally expansionist company. Says Smith: “We’re committed to lowering costs and prices at a rapid clip.”

EURO THRASH. Smith showed just how rapid on May 1, when he began a decisive, and massive, retreat from the company’s disastrous European operations. That’s where FedEx piled up much of its \$1.2 billion in international losses for the past four years. FedEx fired 6,600 employees, shut down operations in more than 100 European cities, and contracted with two other companies to handle deliveries to all but 16 major business centers that it still serves directly for intercontinental shipments. FedEx is still king on its

home turf, but there, too, it has been facing growing competition from such players as UPS, Airborne Freight, and the U.S. Postal Service.

Before the European retrenching, there was even a rumor that Smith’s job was in jeopardy—though directors now deny it. Still, Smith is clearly under pressure. “We’re not at the GM level,” says one director, “but I can tell you the board is following this very closely.”

The strain will continue for some time. Even Smith admits that a full recovery from the international debacle is not imminent. He’s particularly worried about the economic slowdown in Japan. But Europe, too, may continue to plague him. The cut-back there will reduce fixed costs by at least \$300 million a year. Still, analysts predict that even after the downsizing, international operating losses may top \$200 million

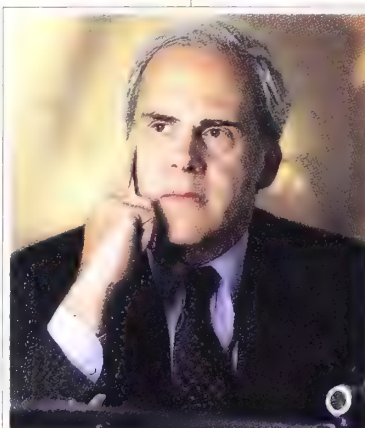
in the fiscal year that starts June 1 (chart, page 126).

Some analysts are also worried that the downsizing in Europe may generate new problems as multinational corporations switch allegiance to companies with more extensive route networks there. FedEx insists that U.S. shipments to Europe will continue to be delivered on time—even if final delivery must often be handled now by its partners.

But rivals United Parcel Service Inc. and DHL Worldwide Express are swooping in to try to exploit such fears. Donald W. Layden, senior vice-president of international operations for Atlanta-based UPS, declines to estimate how much new business it will pick up. But his company is now preparing a major acquisition in Britain to complete its Western European network, and he predicts his firm will turn its first profit in Europe in 1994. European market leader DHL boasts that in recent weeks it has gained at least some European business from former FedEx customers, including Procter & Gamble, Ernst & Young, and British Petroleum.

NO SURRENDER. Why was FedEx’s overseas foray such a disaster? When FedEx entered Europe in 1984, it faced entrenched competitors. And Smith admits he misjudged the size of the overnight delivery market in Europe. Expecting it to eventually rival in size the nearly 3 million shipments made daily in the U.S., he set up a costly hub-and-spoke air network based in Brussels. But European express shipments stalled out at only 100,000 per night, causing Smith to pull the plug. FedEx’s fleet of widebody intercontinental freighters all-too-often flies less than full on flights back from Europe to the U.S. and also between the U.S. and Pacific Rim locations.

Smith argues that a retreat abroad doesn’t mean surrender. Despite the current weakness, he thinks FedEx will eventually be able to fill up its Asian and European flights with more high-yielding express shipments and less heavy air cargo, which generates only a third as much revenue per pound. To meet this goal, FedEx is courting freight forwarders with juicier commissions. And since January, 1991, it has been



The board is riding CEO Fred Smith hard, but ‘we’re not at the GM level,’ says one director



A promise not to tell who really picked out the prom corsage.

A promise to keep the dreaded Aunt Edna from checking in when I'm away on business.

A promise to make things easier for you than they were for me.

Nothing binds us one to the other like a promise kept. Nothing divides us like a promise broken. At MassMutual we believe in keeping our promises. That way all the families and businesses that rely on us can keep theirs.



MassMutual[®]

We help you keep your promises.SM

The Corporation



the only cargo line offering an intercontinental overnight-freighter service that guarantees delivery of packages of up to 150 pounds by 10:30 a.m. to nearly all of the U.S. Smith also says FedEx is showing strong growth in its Business Logistics Service, which now generates sales of about \$400 million per year by managing inventory and shipping for such companies as Laura Ashley. And on May 8, the company announced the opening of a PartsBank facility in Singapore, which, along with existing warehouses in Memphis and Amsterdam, is used to stock client firms' inventories for just-in-time shipments throughout the world.

Perhaps the largest savings will come through the use of more efficient aircraft. FedEx took delivery of the first of 13 MD-11s in May, and Smith says the savings are already dramatic: The smaller, widebody jets save \$40,000 on a single Hong Kong-Anchorage run over what it costs to fly an older 747. Over the course of a year, the planes will save FedEx nearly \$12 million on that route alone. The 13th MD-11 should be in place by September, 1993. But Smith still refuses to predict when the international business will break into the black. "What I can say is that we're moving down the road with what I believe is absolutely the right strategy," he says.

DISCOUNT DELIVERY. Smith has already implemented pieces of that strategy in the U.S., where it has helped defend FedEx's leadership position. Domestic operations have held up remarkably well throughout the recession. Despite a long-running price war with rivals UPS and Airborne, analyst David P. Campbell of Scott & Stringfellow Investment Corp. in Richmond, Va., estimates that profits of FedEx's core business in the U.S. will soar by 15%, to a record \$789 million, in the coming fiscal year. Campbell expects the increase to come from increased volume and productivity gains. FedEx's market is certainly still solid.

Colography Group Inc., a market research firm based in Marietta, Ga., pegs FedEx's market share at 43.3%—up from 40.4% five years ago—and still ahead of UPS's 25.2% and 14.3% for Airborne Freight Corp. The U.S. Postal Service is fourth with a 7.6% share for its Express Mail.

All of these carriers have benefited from an 89% jump in overnight shipments in the past five years, but the name of the game remains driving down costs. FedEx

says price wars accounted for about half of the 8.4% drop in the last 12 months in its yield, or the amount of revenue collected per package, which fell from \$15.28 to \$14 in March. The rest came from a shift to cheaper afternoon or second-day deliveries.

FedEx isn't the cheapest express delivery service—except when it needs to be. Lower pricing helped FedEx beat out Airborne, which had the business, for the contract as exclusive carrier for Paramount Communications Inc. Robert G. Brazier, president of the low-cost carrier, told shareholders at Airborne's annual meeting in April that FedEx and other package carriers were pummeling the company on price. FedEx labels that a distortion. "We're just passing along productivity savings to our customers," Smith says.

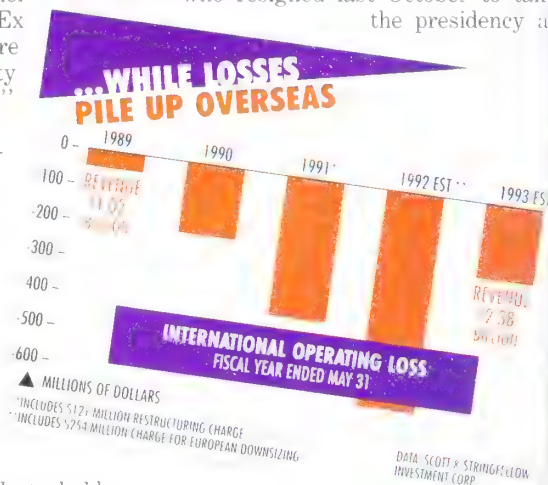
Smith credits new technology for much of the productivity gains. He cites a new handheld device that couriers now use to generate zip code labels. They speed the sorting process at FedEx's hub locations and cut down on the numbers of misrouted packages. And, of course, technological gains have allowed FedEx to hold down its payroll. That helps explain why FedEx has been able to hold down employment growth to 4.8% in the last year while its average daily volume of express packages is up 15% to 1.5 million units.

To build loyalty among its users, FedEx has installed so-called "Powershops" computer terminals in more than 11,000 customer offices, which generate more than one-third of total volume. The terminals let customers prepare their own packages for delivery and then track them electronically, from point of shipment to final destination. FedEx has offered terminals to high-volume customers for several years, but now it is pushing them into many more offices.

New fuel-efficient aircraft also will be used domestically. FedEx expects to see major reductions in costs in 1994, when it begins flying the first of 25 Airbus A300-600 freighters on its U.S. routes. One A-300 with two pilots and two engines can carry the same amount of cargo as nearly two and a half 727-100s—with seven pilots and seven engines.

BULLET DODGING. Smith will feel pressure until substantial gains are won. Possible credit problems may haunt him. In March, Standard & Poor's Corp. lowered ratings on FedEx's commercial paper to A-3 from A-2, citing "near-term liquidity pressure" from the European restructuring. FedEx managed to persuade Moody's Investor Service that the losses had been stemmed, and dodged a credit bullet on May 5, when the concern confirmed the carrier's Prime-3 rating on its outstanding commercial paper. But if the CEO doesn't make good on his word, he could well find FedEx banished from the commercial paper market and forced to tap more expensive credit lines for operating capital.

Board members may be riding Smith tougher than they care to confess. Several sources say the board is pressuring him to find an outsider to replace Chief Operating Officer James L. Barksdale, who resigned last October to take the presidency at



McCaw Cellular Communications Inc. "Whether we fill that job internally or go outside, it's not particularly useful to discuss the issue in the media," Smith says.

And the company's stock price exerts a silent and powerful pressure of its own. FedEx stock, now around 40, is well below its peak of 75 in 1987. Says Smith: "I'm absolutely determined that we meet shareholder expectations. With more than 8% of the company's stock in his private portfolio, Smith should have a very good idea of what those expectations are."

By Chuck Hawkins in Memphis

Business Week's

1992

Annual Report Directory

Annual reports are a vital investment tool. They offer the past and present statistics of a company's performance. Annual reports also offer pertinent information about future expansion, diversification and other factors that determine a company's direction.

Advertisers in this Directory are making their financial data available so that you, the potential investor, can get a closer look.

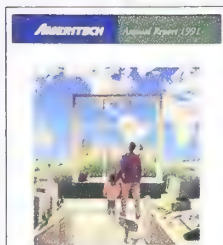
Business Week's reader service card enables you to choose which annual reports you wish to receive. Circle the corresponding numbers on the reply card in the Directory, mail it in and you will receive the annual report of your choice...free of charge.



AMP Incorporated

Sales	(Mil.)	EPS	DIV
1991	\$3,095	\$2.45	\$1.44
1990	3,044	2.70	1.36
1989	2,797	2.63	1.20
1988	2,670	2.96	1.00
1978	.8	.89	.20

14% compound annual growth rate since 1956. 9% of sales spent in RD&E. Good growth expected in 1992. *Steady Growth:* Through new products and markets, sales were up all but 4 of 50 years - with 80% of sales electronics-oriented and 70% of sales are products applied by AMP tools and machines. *Broad Diversification:* Leading producer of electrical/electronic connectors, sells to virtually every manufacturer of electrical & electronic equipment (over 250,000) and tens of thousands of customers who install this equipment. Subsidiaries in 30 countries. Strong worldwide capabilities. (NYSE:AMP)



Ameritech

Ameritech leads the six other regional telecommunications companies, with a return to equity of 14.5%. Net income was \$1.17 billion. Ameritech's five Bell companies serve more than 12 million customers in the Great Lakes region. Other communications

businesses provide mobile communications, paging, directories, voice messaging, lease financing, and audiotex services worldwide.

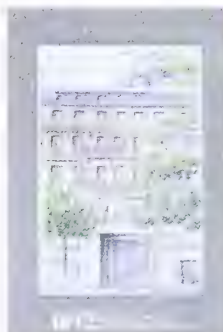


The Associated Group

The Associated Group is a \$2 billion diversified insurance and financial services company doing business nationwide. As recently as 1986, it provided one product (health insurance) in one state. The company's growth and diversification were the result of a strategic plan that was implemented in 1800 days.



THE ASSOCIATED GROUP



BFCE

BFCE offers corporations diversified financing instruments as well as new and highly innovative products to manage their payments in France and worldwide. The Bank solves currency and interest rate risk management problems and provides a full array of investment instruments.

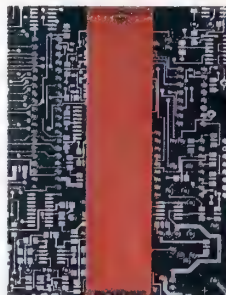
BFCE is expanding services for merger and acquisition and equity financing, through its subsidiary, Société Financière de la BFCE.

BFCE Banque Financière de la BFCE



CSX Corporation

CSX Corporation, with assets of \$13 billion and 1991 revenue of \$8.6 billion, is an international transportation services company with principal businesses in rail freight, ocean container shipping, intermodal carriage, inland barging, trucking, warehousing, distribution, and related services. The company also has interests in real estate and resorts. Headquarters are in Richmond, VA.



Incentive

Incentive is a new large Swedish industrial group formed through the division of the ASEA Group. Incentive has a turnover of SEK 14 billion, 14,000 employees and 200 companies all over the world. Incentive is active in:

Materials Handling • Transportation • Construction & Environment • Process Industries • Imaging Technology • Power • Other Operations. Important shareholdings in ASEA, Electrolux, and ESAB. Listed on the Stockholm Stock Exchange since July 1991.

INCENTIVE



Canadian National

Canadian National Railways offers transportation and distribution services in Canada and the United States through its newly-integrated continental rail system, CN North America. CN also manages and develops real estate, operates the CN Tower in

Toronto, and provides international transportation and telecommunications consulting services. Revenues total \$4 billion. Its mission is to meet transportation and distribution needs on time, safely, and damage-free.



International Airline Support Group

Worldwide supplier of commercial aircraft spares; extensive rotatable and expendable inventories for Boeing 727, 747; Douglas DC-8, DC-9; MD-80; Lockheed L100, L1011; Pratt & Whitney engines. Acquisition of

excess inventories; airline/operator consignment marketing and sales; inventory management and contract purchasing; sale, lease and exchange of rotatable, system components. Aircraft sales and leasing. Salvage and retrieval.



Cyprus Minerals Company

Cyprus Minerals Company, with \$2 billion in assets, is a major U.S. producer of copper, coal, molybdenum, lithium, and talc. It also produces gold, iron ore, and zinc. The strong balance sheet is characterized by debt of only 15%. Share-

holders have received an 18.6% compounded return on their Cyprus investment during the last five years.



KCI

KCI is the leading provider of high-tech medical equipment on an as needed rental basis to healthcare providers worldwide. KCI also offers hospitals comprehensive programs to enhance asset efficiency and increase cash flow through improved

asset tracking and billing, reduced service maintenance contract costs, and repurchase of idle equipment. KCI is strategically positioned to play an important role in helping to improve the efficiency of the healthcare delivery system.



Harsco Corporation

Harsco Corporation is a highly diversified, industrial company specializing in 18 products and services integral to steel production, construction, transportation, energy, infrastructure rebuilding, and worldwide defense. Comprised of 11 divisions represented in 32 states and 14

countries, Harsco's operating groups are: Industrial Services and Building Products; Engineered Products; and Defense.



Lyondell Petroleum Company

Lyondell Petrochemical Company is one of the nation's largest and most successful producers of basic chemicals and refined products and helps make possible many of the necessities of life. With 1991 sales of \$5.7 billion and earnings of \$222 million,

Lyondell ranks in the *Fortune 100*, achieving differential performance through operating flexibility, low cost and high productivity. (NYSE: LYO)



Minnesota Power

Minnesota Power is a diversified electric utility whose primary business is providing electric service in central and northeastern Minnesota. Subsidiaries include BNI Coal, Lake Superior Paper Industries, and water utilities in Florida and the Carolinas.

Automatic dividend re-investment program. Total shareholder return in top 15% of U.S. electric utilities.



Pacific Scientific Company

Pacific Scientific Company is in the business of making and selling electrical equipment and aircraft safety equipment. The company stock trades on NYSE and 1991 sales were \$173 million with earnings of 41.46 per share. Principal markets are

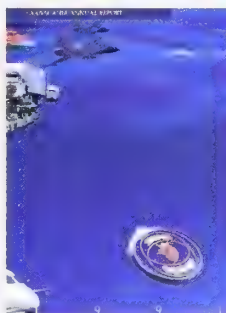
factory and office automation, aircraft industry, electric utilities, manufacturers of semiconductors and pharmaceuticals.



Nordson Corporation

Nordson Corporation is a world leader in systems that apply adhesives, sealants, and liquid and powder coatings to consumer and industrial products during manufacturing operations. Since 1986, sales and earnings per share have grown at average

rates of 18% and 21%, respectively. For 1991, gross margins were 59% and return on shareholders' equity was 25%.



Saab-Scania

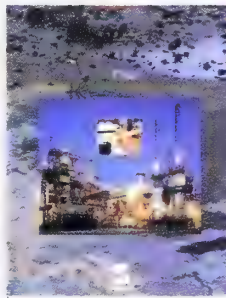
Saab-Scania's operations are: Scania Trucks & Buses, Saab Aircraft, Saab-Scania Combitech and Saab-Scania Finance. Saab-Scania has 31,656 employees. Sales in 1991 amounted to SEK 29,299,000,000 and income to SEK 2,811,000,000. These figures are exclusive of Saab Automobile,

which is owned equally by Saab-Scania and General Motors, but is not consolidated in Saab-Scania.



Norfolk Southern

Norfolk Southern Corporation, "The Thoroughbred of Transportation," is a Virginia-based holding company that owns all the common stock of and controls a freight railroad, Norfolk Southern Railway Company, and a motor carrier, North American Van Lines, Inc.



Safety-Kleen

Safety-Kleen provides a variety of services to nearly 500,000 businesses that generate hazardous and quasi-hazardous waste fluids. The world's largest recycler of solvents and refiner of used lubricating oils. 275 branches worldwide, 14 solvent recycling centers, two used-oil re-refining plants and three fuel

blending facilities for cement kilns. 1991 sales \$695,001,000; earnings \$51,551,000; EPS \$0.90 (NYSE: SK)



Overseas Shipholding Group, Inc.

OSG, one of the world's largest bulk shipping companies, is engaged in the ocean transportation of liquid and dry bulk commodities. The Company currently has on order four double-hulled 93,650 deadweight ton (dwt) tankers

for delivery to its international fleet during 1993 and 1994. OSG currently owns and operates a fleet of 65 vessels, aggregating 6.1 million dwt. OSG's strong financial condition and the prospects for the bulk shipping markets are detailed in the Company's Annual Report. (NYSE, PSE: OSG)



Skandia



Sweden-based Skandia Group Insurance Company Ltd., offers insurance and related financial services. They have become increasingly more international with offices outside Scandinavia, mainly in the EC countries and the US. Insurance operations are supported by extensive investment management operations. In 1991 gross premium income was SEK 38

billion and total assets exceeded SEK 200 billion. Skandia is listed on the exchanges in Sweden, Norway, Denmark and the U.K.

Skanska AB



Skanska

Skanska AB is the biggest construction and real estate company in Sweden and a leader in Europe as well, with annual sales of about \$6 billion, and more than 30,000 employees worldwide. Skanska's international experience is well documented through large scale projects in about 70 countries.

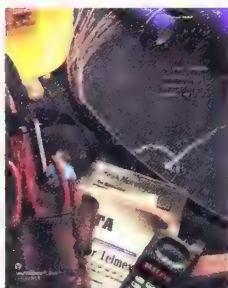
SWEDISH TELECOM



Annual Report 1991

Televerket

The Telverket Group offers public and private networks for telephones, data communications, and mobile telephones. In 1991, the Televerket Group's revenues totaled \$5.7 billion, up 10%. Return on total capital was 8%. Televerket invested a total of \$1.6 billion. Telephone traffic rose 6.2% and network performance was 98.9%.



Southwestern Bell Corporation

Southwestern Bell Corporation is a St. Louis, MO.-based telecommunications company with 1991 net income of \$1.2 billion, revenues of \$9.3 billion, and EPS of \$3.85. SBC provides local telephone service in

five states, has one of the fastest-growing cellular operations, and a major stake in Telmex.

**To obtain your copies
of this year's annual reports,
consult the *Readers Service Card*
in this directory.**

Plan Now to be a Part of Next Year's Directory

Business Week's

1993

Annual Report Directory

**will be published in the
May 24, 1993 issue, with an ad close
date of April 12, 1993.**

FREE INFORMATION FOR READERS OF **BusinessWeek**

Want more information about advertisers in this section? If so...

1. Review the list of advertisers on the listing page.
2. Circle the corresponding number on the postage-paid reader service card, complete the necessary information and drop in the mail.
3. Or, call toll-free Monday-Friday, 8am-5pm MST:

1-800-232-WEEK

Offer expires July 27, 1992

Annual Report Directory

- | | |
|--|-------------------------------------|
| 1 AMP Incorporated | 13 Minnesota Power |
| 2 Ameritech | 14 Nordson Corporation |
| 3 The Associated Group | 15 Norfolk Southern |
| 4 BFCE | 16 Overseas Shipholding Group, Inc. |
| 5 CSX Corporation | 17 Pacific Scientific Company |
| 6 Canadian National | 18 Saab-Scania |
| 7 Cyprus Minerals Company | 19 Safety-Kleen |
| 8 Harsco Corporation | 20 Skandia |
| 9 Incentive | 21 Skanska |
| 10 International Airline Support Group | 22 Southwestern Bell Corporation |
| 11 KCI | 23 Televerket |
| 12 Lyondell Petroleum Company | |

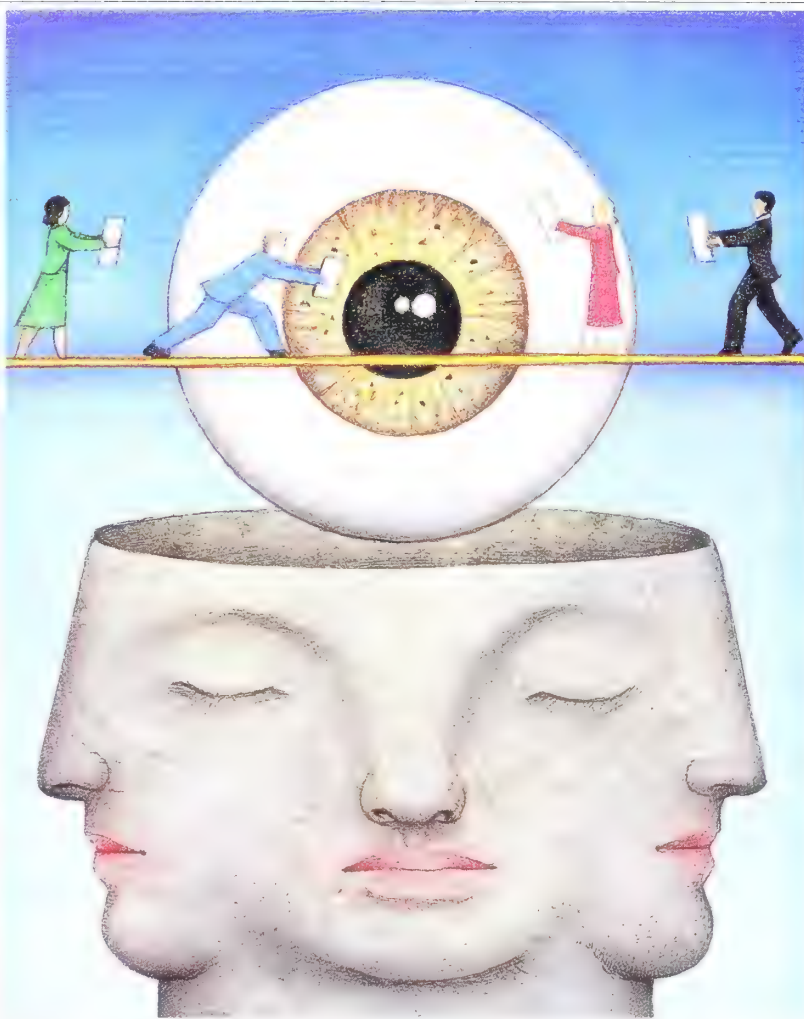
GETTING THE KINKS OUT OF YOUR CREDIT REPORT

When Senator Richard Bryan (D-Nev.) and his wife went to buy a house in Las Vegas last year, a routine credit check turned up a few surprises. His report listed credit cards that just "weren't ours," he says. It also showed several lawsuits that had been filed against the state of Nevada, naming Bryan because he was then governor. Bryan again found errors when he refinanced the house in January. The most glaring was a tax lien that didn't exist. "I was frankly shocked to see some of that stuff in there," he says.

Both times, Bryan got the errors deleted by writing to the credit bureaus. But, the senator says, "I'm not unmindful that John Q. Public would have more problems." Bryan is pushing a bill amending the Fair Credit Reporting Act of 1970 to help consumers fix false credit reports. The provisions include

a 30-day deadline for the bureaus to resolve disputes. The bill follows a wave of criticism and lawsuits over practices by the Big Three: Equifax, Trans Union, and TRW.

'BE VIGILANT.' The furor is also encouraging the credit agencies to take steps on their own. They have made it easier and cheaper to get credit reports, but it still can be tough to delete errors. Says Edmund Mierzewski, consumer advocate for the U. S. Public Interest Research Group: "The short answer to



how to fix your credit report is be vigilant and persistent."

Start by knowing what information is collected. Credit reports contain data supplied by banks and other institutions about loans, credit cards, and bill payments. They also include job information and data culled from public records, including legal judgments. Most negative data remain on file for seven years, but bankruptcies can stay for 10 years. Creditors and others use the reports for making such decisions as

granting a mortgage or renting an apartment.

Consumers can minimize errors by completing credit applications carefully, always using the same name. For example, if you use a middle initial, be sure to include it. Don't wait until you've been denied credit or shut out of a job before checking for accuracy. The Big Three enter 2 billion pieces of data into credit records monthly, so the odds of errors slipping in are high.

Consumer advocates sug-

gest getting copies of your credit report once a year from each bureau because they collect different data. Also review your reports six months in advance of a major purchase such as a house or before seeking a job that requires a security clearance or background check.

The credit bureaus will send you the reports upon request, but they differ in how much they charge. If you're denied credit, the bureaus must provide a free copy if you request it within 30 days after being turned down. Industry practice expands that period to 60 days.

GRATIS. For consumers who are just curious, TRW now provides a free report annually. Equifax charges \$8, except in a few states where the caps are lower. The company requires that you send your request in writing. Trans Union has some 300 offices that will supply the reports

for an average of \$15 (table).

When making your requests, ask the bureau to include a pamphlet explaining your legal rights. You can also get the information from the Federal Trade Commission, Bureau of Consumer Protection, Division of Credit Practices, Room S-4429, 6 St. and Pennsylvania Ave. NW, Washington, D. C. 20503 (202 326-3758).

The most common mistakes include credit data that belongs to someone else and outstanding credit-card balances

HOW TO FIX YOUR CREDIT REPORT

- 1 If you're denied credit or anticipate a major purchase, request a copy of your credit report in writing from the three big credit bureaus
- 2 If you find an error, fill out and return the dispute resolution form, attaching copies of supporting documents. Send a copy of the complaint to the store or bank that denied the credit or made the error
- 3 The credit bureau must reverify disputed or inaccurate information or delete it from your file. Notify other bureaus about changes
- 4 If the credit bureau disputes the error, the information remains in your file. Tell the agency to note the item is disputed and include a statement in your defense

HOW TO CONTACT THE BIG THREE

EQUIFAX INFORMATION SERVICE CENTER Attention: Consumer Dept., P.O. Box 740241, Atlanta, Ga. 30375-0241 (800 685-1111)

TRANS UNION National Consumer Disclosure Center, 25249 Country Club Blvd., P.O. Box 7000, North Olmstead, Ohio 44070 (no phone number available)

TRW Consumer Assistance, P.O. Box. 2350, Chatsworth, Calif. 91313-2350 (214 235-1200)

DATA BW

that you actually paid. If you find an error, follow the dispute resolution process set forth in the credit report. Fill out the form and return it, along with any documentation that supports your side. Send copies to the original creditor, as well as to any collection agencies.

TAKE A STAND. On average, the bureaus will respond to your complaint within 30 days, at the response time in take months. The agencies will reinvestigate the information going to the public

record or the credit grantor. If the credit bureau still can't verify the data—or does not respond in a reasonable time—it must delete the error. The consumer should

then notify the other two bureaus about the change. Check your credit report in a few months to make sure the mistake isn't reappearing.

The information will stay in

your file if either the credit bureau or original credit grantor disagrees with your stand. But you may write a statement telling your side of the story. The statement or a

summary must be included in any future reports that contain the disputed data. Consumers who fail to get an error corrected should complain. Contact the consumer protection division of your state attorney general's office or the FTC.

You could also sue. "After your first attempt to fix the report, that's the time to do it," says consumer lawyer Joanne Faulkner of New Haven. She says many people think of a lawyer too late, after the two-year statute of limitations

has run out. Winning consumers can recover actual or punitive damages, plus attorneys' fees. While litigation is a last resort, it does pay to stay on the offensive. *Michele Galen*

Ghostwriter Donald Bain is a neatness fanatic. Churning out books supposedly authored by celebrities, he often works in Port Washington (N.Y.) radio on several projects simultaneously—a feat possible only because I'm compulsive about having order all around me," he says. So he was filled with his wife's choice for a birthday gift: an electronic gadget that prints identification labels on plastic strips. Bain has stuck them on filing cabinets, desk drawers, manila folders, and 500 cassettes recorded interviews.

Available under such brands as Brother P-Touch and Casio EZ-Label, the battery-powered electronic devices are a far cry from the familiar Dymo label gun. That decidedly low-tech gizmo, priced at \$15 and up, requires you to spin an alphabet wheel and squeeze a trigger to emboss letters on a plastic tape. Priced just a pound, the new labelmakers have a keyboard on which you type names, numbers, descriptions, special symbols such as a car or airplane. The typing shows up in a small display window, and at the touch of a button it appears in easy-to-

Electronics

FOR A NEW WORLD ORDER, TRY ELECTRONIC LABELING

read letters on a strip that unrolls from a cassette inside.

The labels can read horizontally or vertically in various type styles, including italic

and bold. By switching cassettes, you can print in different colors, such as gold on black tape or black on white. Some models automatically



print numbered labels consecutively. And you can store often-used names or phrases in memory to make duplicate labels without retyping.

SHIRTS 'N' SCANS. Discounted widely, Brother's basic model with a six-character display window lists for \$249. A Dymo 4500 machine (also \$249) from Esselte Pendaflex has a 15-character display and can print two-line labels and underline words for emphasis. At \$299, Casio's EZ-Label makes labels with up to four lines of text. With an optional scanning pen, it will copy type or graphic images on tape—even an iron-on kind you can use to decorate T-shirts.

The labelmakers are handy for business. "People aren't just buying them to dress up a videotape collection or label the tool rack," says Brother's Sales Vice-President Dean Shulman. Hospitals use it to label items used by patients, labs to identify look-alike samples and drugs, and shops to keep track of small parts.

The devices are so convenient it's easy to go overboard. Bain admits to carrying his all over the house, "and when I see something that needs a label, I make it on the spot." *Don Dunn*

Smart Money

NO-LOAD LIFE INSURANCE: A BIGGER BANG FOR YOUR BUCK

These water-splashing insurance salespeople are holding a little secret from you: Most of the premiums you pay in the early years of your life policy go either into their pockets as commission or for their company's administrative overhead. Trouble is, that holds back growth of the policy's cash value during its initial five years or so. What you've paid in is more than the policy is worth if you need to borrow against or redeem it. That's why a new type of

policy," says Don Reiser, founder of three-year-old Veritas Corp., a Houston-based leader in the no-load field.

The no-load concept is anathema to major insurers and their vast sales forces. The majors contend that their agents offer better, more personalized financial planning than an operator at the end of an 800 line. And they argue that their larger asset bases and high-powered investment managers will bring policyholders fatter and safer returns over time.

Except for San Antonio-based auto-insurance giant United Services Automobile Assn., the nine other no-load providers tend to be small. Still, almost all of them carry top ratings from A. M. Best and other agencies—and most have been in business for decades. So, odds are they will be around in years to come.

NO MYSTERY. Insurance advisers can guide you to the best no-load policy for your needs. These independent financial planners charge a one-shot fee ranging from \$250 to \$1,000, depending on the size and complexity of your coverage demands. One such outfit, Tampa's Fee for Service, recommends Miami-based no-load insurer John Alden for those seeking the lowest rates. "They're particularly good for male smokers," says Fee for Service chief Keith Maurer. One downside: John Alden's cash buildup is slower because of the low premiums. For referrals to these advisers, call the Life Insurance Advisers Assn. (800-324-7781).

Insurance is an arcane commodity. With no-load, you at least know one thing—that your premiums aren't going into an agent's pocket.

Larry Light

NO COMMISSION, MORE CASH VALUE

Cash surrender value*

Year	No-load policy Premium \$5,825/yr.	Commission policy Premium \$7,265/yr.
1	\$5,844	\$0
2	11,718	4,478
3	17,676	11,504
4	24,097	18,964
5	31,015	26,880
6	38,470	36,090
7	46,503	45,694

\$500 cash value at the end of year 40.
*Based on male non-smoker, policy of \$100,000.

Source: Veritas Corp., Houston.

on—no-load policies, which don't charge agents' commissions. You eliminate the middleman, so the policy's cash value builds up faster. Since this setup also requires less overhead, the net result usually is lower premiums and quicker buildup of cash value (table).

SMALL AND SECURE. No-load insurance is a big challenge to traditional insurance-sales philosophy. "The old thinking is that insurance has to be sold, not just explained," says Reiser. "You need to be convinced to buy



COLD COMFORT: BW'S HAMILTON TAKES THE PLUNGE IN THE PACIFIC

Outdoors

SLICING THROUGH THE OTHER WILD BLUE YONDER

Learning a new sport is that "I got it" moment. The good news about the fast-growing sport of sea kayaking is that whatever your athletic ability, that "I got it" moment shouldn't take more than five minutes—unless your boat has a hole in it.

Kayaks fit right in with the growing "eco-touring" movement, leaving only a ripple behind them as you soak up the scenery. Except for having to pay mind to winds and currents, kayakers have remarkable freedom to explore.

During a vacation in Hawaii, my husband Tom and I went kayaking for the first time, touring the Na Pali River in open-cockpit or "surf-ski" boats. Exploring our cold Northern California ocean waters meant learning to pilot a closed-cockpit kayak. These are typically 14 to 21 feet long and made of plastic or fiberglass. A single-seater costs about \$1,000. Lessons run around \$65, and rentals are \$30 to \$50 an hour.

The most common fear new kayakers have, says Eric Fournier of California Canoe & Kayak School (800-366-9504), is of capsizing and getting trapped underneath. That's because of the "spray skirt"—fabric that fits around your waist to cover the open-

For our first lesson, I paddled into the calm, shallow waters off Princeton on the Pacific coast. All of us novices were quickly in control, slicing through the water. Eric demonstrated some strokes. **DUNKIN' DO-NOTS.** Suddenly, I was in the water. He slid right out of my spray skirt and bobbed to the surface. We spent almost the rest of the class learning how to right a craft and get ourselves or others back in. Experienced kayakers rely on the "Eskimo roll"—flipping the boat upright while in it.

I demonstrated some "not-to-dos." I was unprepared for the cold slap of the water when I capsized, and I let go of paddle and kayak—a no-no, since choppy waters could have carried them in opposite directions. My life took me to the surface, but I began shivering and became disoriented. Eric didn't take that lightly: Hypothermia is a real threat to kayakers.

One problem was that I didn't have warm enough clothes. Sea kayakers wear a wet suit and wetsuit proof paddle jacket, along with layers of wool or synthetic fabric.

After a long day of paddling and eating, I felt better. Despite that chilly experience, we're eagerly planning our next trip.



Our
INTEREST IS NOT
IN HOW *FAST* AN
Investment Accelerates
BUT HOW WELL IT
Performs over Time.

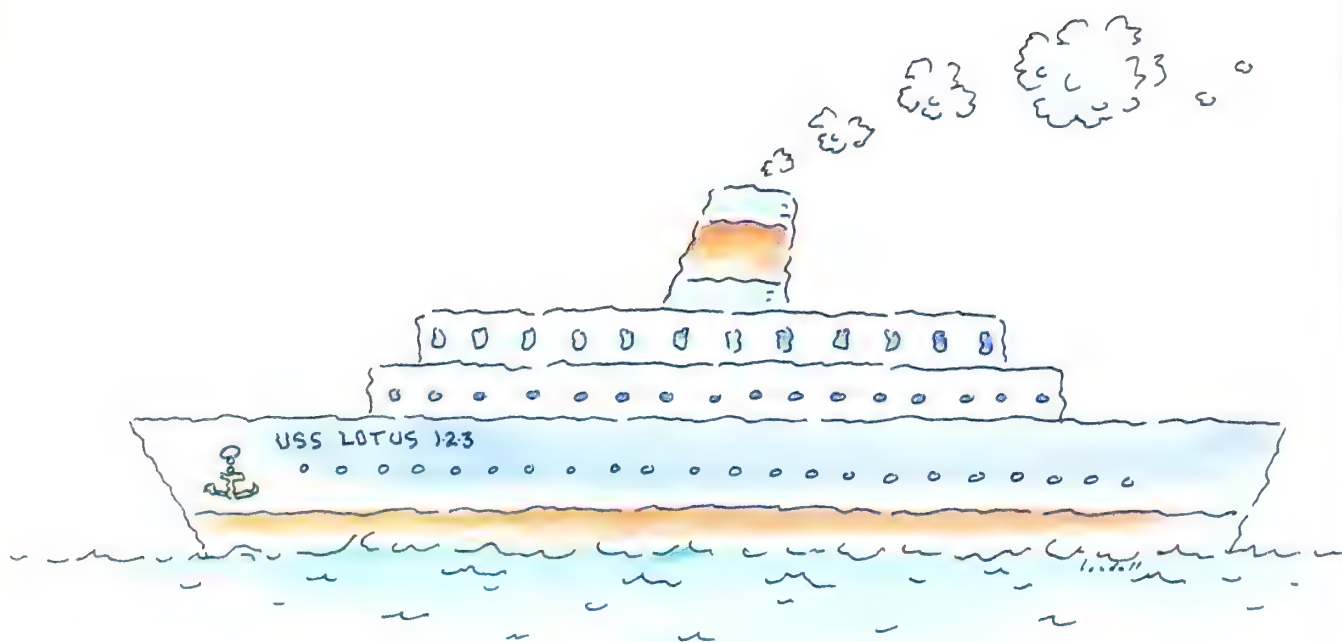
TIME not *TIMING*. That's how we MAKE our INVESTMENT DECISIONS. While others might have an EYE for a QUICK RETURN, *54 years experience* has taught us that an investment CONSTANTLY NURTURED, and carefully steered, should *PAY OFF HAND-SOMELY* in the LONG RUN. Something our 1.7 million *INDIVIDUAL INVESTORS* and over 200 INSTITUTIONAL CLIENTS *appreciate*.



A TIME - HONORED TRADITION
IN MONEY MANAGEMENT

The Putnam Companies One Post Office Square, Boston MA 02109.

Saying bon voyage to
your old spreadsheet is
easier than you think.





Introducing Microsoft Excel 4.0 for Windows,
the spreadsheet worth switching for.

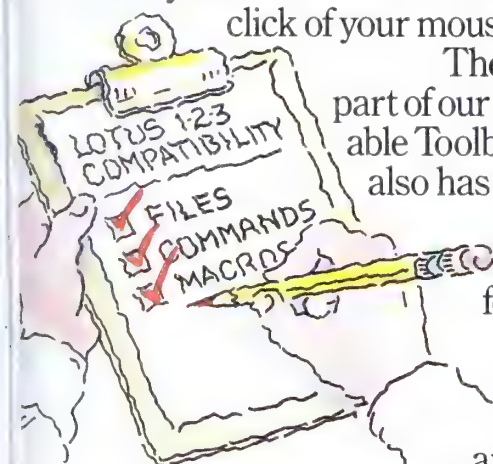
off in the same old boat you're in now.

You won't have to look very far to discover new Microsoft® Excel 4.0 for Windows. It's the spreadsheet that makes your everyday spreadsheet tasks—not to mention more complex things—amazingly easy.

Just how easy?

Try one-step just-about-everything. For example, Autosum™ instantly totals rows or columns with a click-click of your mouse.

Autoformat lets you apply one of 14 professionally designed, sharp-looking formats to your worksheet with another click of your mouse.



Using your 1-2-3 files, your own macros and familiar commands in Microsoft Excel 4.0 for Windows is no problem.

Someday soon, you'll probably be making a decision about a new spreadsheet.

And that will probably mean a spreadsheet for Windows.™

When that day comes, we hope you'll explore a little before shoving



Hundreds of thousands of Lotus 1-2-3 users are switching to the critically-acclaimed Microsoft Excel for Windows spreadsheet.

They're both part of our customizable Toolbar, which also has a number of other handy features, such as a Spelling Checker and instant charting.

Then there are learning tools like Wizards, which are step-by-step guides of various features. Everything's designed to help you get your day-to-day number-crunching done with the greatest of ease.

But how easy is it to switch?

First of all, naturally you can bring all of your existing 1-2-3® work with you, because Microsoft Excel reads and writes all your 1-2-3 files, and runs your 1-2-3 macros—unmodified. So your investment with Lotus® is safe.

What's more, Microsoft Excel lets you learn using what you already know. With Help for Lotus 1-2-3 users, when

you enter your familiar 1-2-3 commands, Microsoft Excel 4.0 for Windows shows you the corresponding command.

(By the way, we're the only spreadsheet for Windows that offers this easy way to learn. Surprised?)

Finally, if you're using Lotus 1-2-3 or Borland®

Quattro® Pro, you can upgrade to new

Microsoft Excel 4.0 for Windows for \$129.* (There's even a 90-day money-back guarantee.**)

But there's much more to Microsoft Excel 4.0 for Windows than we can tell you about here. We recommend asking for a demo at your local software reseller's. Or just give us a call at (800) 323-3577, Department Y29, to find out more or to order your copy.

Before you know it, you could find yourself giving your old spreadsheet the old heave-ho.



The spreadsheet for Windows.

Microsoft
Making it easier

It was a fantasy induced by the dread of another subzero winter: We would persuade some adventurous couple to trade their house on the Hawaiian island of Kauai for ours on Chicago's North Shore. Just for a week or two. In February.

Blithely, we paid \$50 to list our house with the Vacation Exchange Club, a leading exchange service based in Hawaii. Banking on our quaint colonial's prime location, we waited for the offers to roll in.

We're still waiting—and have been since last July. But we did learn an important lesson for anyone thinking about house-swapping: If you don't live on the East or West Coast or in Florida, prepare to be extraordinarily persuasive and patient. That's especially true if you're looking for an overseas trade. Says five-time exchange veteran Marshall Kilduff, who is a San Francisco resident: "I don't think Europeans know anything about the U.S. but skyscrapers and surfboards. That's a hitch for people in the Midwest."

EARLY BIRD. But if you live in a place such as New York, Orange County, Calif., or Palm Beach, Fla., you're in luck. There's plenty of interest from people with 200-year-old English cottages, Paris apartments, and Spanish beach pads to trade. You can find everything from palatial spreads with yachts,

Travel

FIVE ROOMS, VIEW OF THE SEINE, NEAR METRO. WANNA SWAP?

chauffeurs, and cooks to modest dwellings. And you can even find a few listings in Eastern Europe, Japan, and Australia.

Since Europeans have been swapping houses with each

get the first book of the year, which usually comes out in January or February. Vacation Exchange Club publishes four a year, and Intervac U.S. puts out three.

Intervac (800 756-HOME)

in Chicago, such as invigorating cross-country skiing opportunities, we sat by and expected them to call us. "It's important to be active," says Debby Costabel, co-owner of Vacation Exchange Club (800 638-3841), which has 10,000 listings in 57 countries. "You should send letters and call the people you're really interested in."

ON YOUR OWN. Once you find someone to trade with, make solid plans about such details

as dates and exchanging keys, and agree on a contingency scheme in case a problem arises. Since the exchange services offer no guarantee or protection, you're on your own: Ask for references, and seek out experienced swappers.

Lori Horne, co-owner of Intervac, says she hears few complaints. Since swappers occupy the homes of the people who are staying in their houses, most of them take extra care. "If for some reason you feel uncomfortable about strangers sleeping in your bed, don't exchange," warns Horne, whose family has successfully swapped a dozen times since 1980. "It won't work."

But if you're not too fussy, house-swapping can be a way to have an affordable holiday in a fabulous place. Mary Allen, a retired child-development specialist, has swapped her three-bedroom Manhattan apartment five times since the mid-1980s—twice to go to Paris and once each for places in Amsterdam, Berlin, and Rome. Her favorite was a 17th century flat in Paris near the Place de la Bastille.

Although it's probably a little late to arrange a summer exchange this year, swappers interested in fall and winter trades should get listed as soon as possible. Order the books soon. Anyone want a quaint colonial on Chicago's North Shore for next February?

Julie Flynn



other for much longer than Americans have, you can choose from Euro-listings galore. Many house-swappers are looking for summer exchanges, and the best houses and locations go quickly. So the trick is to make sure you

takes listings all year round, with a November deadline for the first—in February. It catalogs 8,000 properties, grouped by country and region. To get the book and your house listed for one season costs \$45.

As soon as the books arrive, circle all the houses or apartments that look interesting in the region where you want to vacation, and call or write to the owners immediately. Don't assume you'll get your first choice. In fact, the safest bet is to get in touch with a dozen or more potential swap-mates.

Our mistake was being way too complacent. Instead of selling potential swappers on the good points of wintering

Worth Noting

COMPLAINT CASH. Discount brokerage firm Quick & Reilly refunds the commission on any trade if you write within 45 days to complain about anything (except the performance of a stock). The service guarantee covers, for example, a broker's rudeness or failure to execute a trade on

TRAVELING LIGHT. Learn ways to save on airfares, cruises, and hotels with *The Guide to Free and Discounted Travel* (\$17.95) by Jesse L. Riddle. It includes information on airline discounters, senior bargains, courier service, and more. Call 800 222-3599.

GREEN TOYS. Get preschool arts and crafts toys made from recycled and biodegradable materials from Shure Products (312 633-9002).



Just a fraction of what we spend dining out could help pick up the tab for a good cause.

If we all shared just a small amount of our money and time with the causes we really care about, it would be a sure recipe for success.

Against hunger. For better health. Or to improve our arts and culture.

Millions of people have helped establish five percent of their incomes

Give Five.

What you get back is immeasurable.

and five hours of volunteer time per week as America's standard of giving.

If we all reached this standard, we could generate more than \$175 billion every year. With a force equivalent to 20 million full-time workers.

So make it your goal to give five. And help keep society well-nourished.

If an accident happened and you YELLED,
"Is there a middle manager in the house?,"
would anyone come to the rescue?

What is a middle manager, anyway?

Valuable decision-maker, or paper pusher?

How do you measure?

Sales per employee? Memo count?

Meetings per hour (MPH)?

And now that we're all trying to

re-orient the corporation

what do we do with them?

Try taking them to re-orient their jobs.

From the ground up.

Maybe we can eliminate associated inefficiency.

Eliminate it completely.

Eliminating all the knowledge

and/or wisdom of your customers.

That's certainly appropriate.

That's what we do in the world.

That's the business of business.

That's the business of business.

That's the business of business.

That's the business of business.

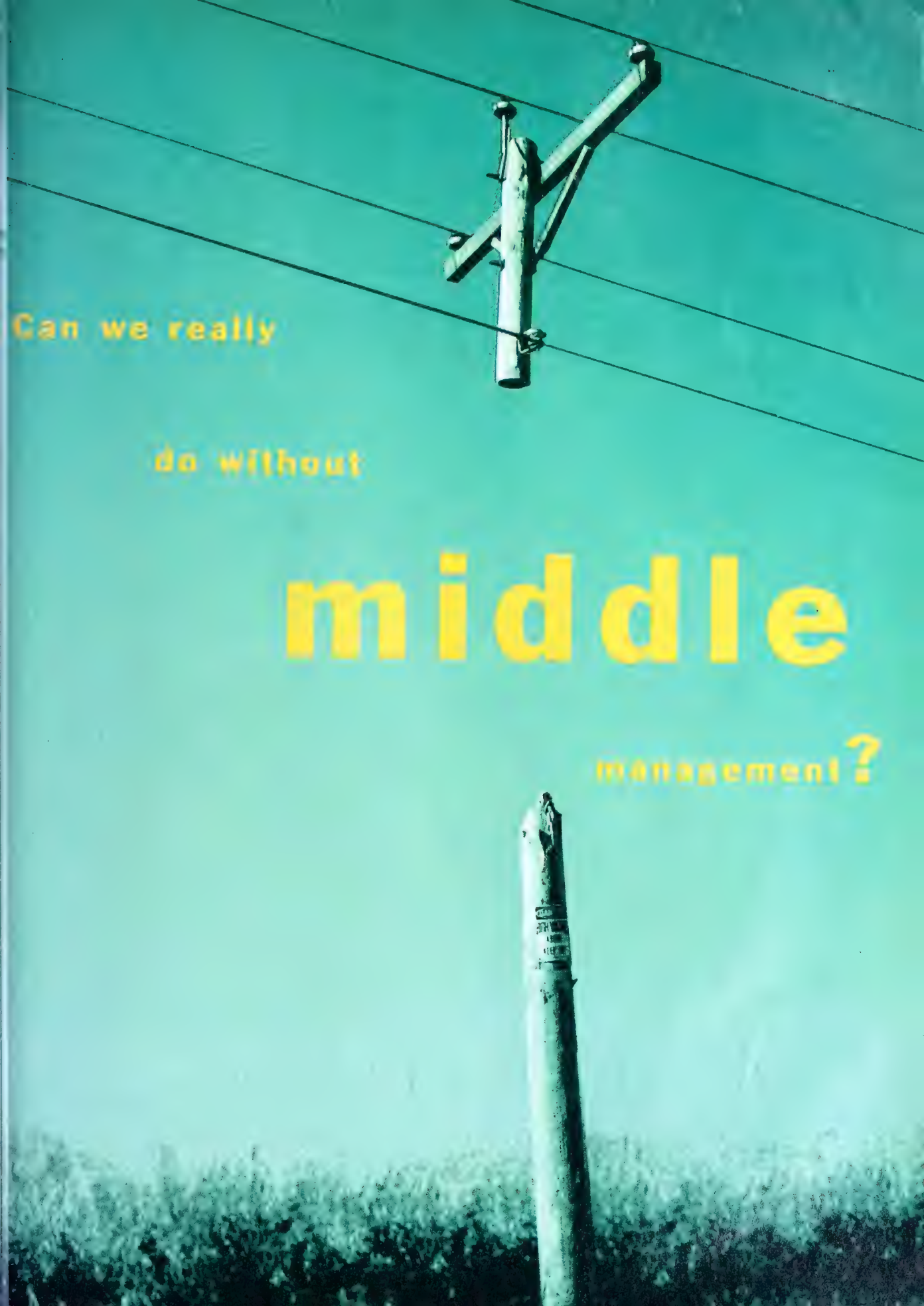
That's the business of business.

That's the business of business.

ENCL SOFTWARE

Dept. ENCL Software Solutions

1000 10th Avenue, Suite 100



Can we really

do without

middle

management?

The values we're teaching kids are years behind the times.

It's 7:50 a.m. And not one minute later, the San Francisco Conservation Corps meets outside its headquarters at Fort Mason for morning exercise.

There are 150 of them. Of all ethnic backgrounds. From all over San Francisco.

Quickly, they divide into work crews and head out for every corner of The City To plant trees. To clear weeds. To build playgrounds. To renovate community centers.

But along with making vitally needed civic improvements, these kids learn valuable

respect. The diligence needed to get a job done right. And the feeling of dignity that results. Lessons they might not have learned otherwise.

The City of San Francisco Conservation Corps proved it



teaching young people to help themselves and their communities beat

San Francisco businesspeople. Unemployed

people are starting work with training

and support.

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps

San Francisco Conservation Corps



San Francisco
Conservation Corps

...the ... of ...

[illegible]

10th Anniversary
FREE
NETWORK
STARTER PACK

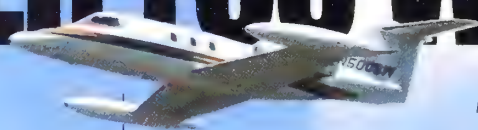
FORWARD

1-800-795-0014



SITKA

PRINTERS THAT WORK WHEREVER YOU WORK!



Now there's a Kodak Diconix printer for you,
wherever and whenever you work. Who gives you a choice
of mobile and portable printers? Kodak!



Some people want a quality
desktop printer that's small
and light enough to carry
between home and office.

Some people want a portable printer that's compact and rugged
enough to print anywhere, anytime. Now Kodak offers both!

A compact pro, the mobile desktop printer.

The new Kodak Diconix 701 printer delivers professional-quality
text and graphics on your desktop, at the office, at home—or



New Kodak
Diconix 701 printer.
The compact pro.

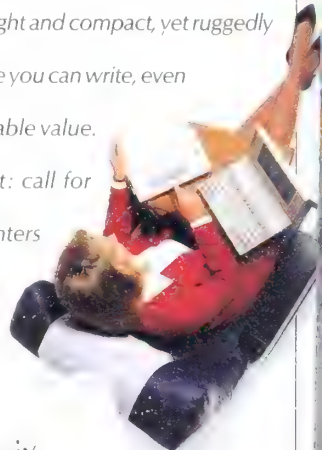
in-between, with the optional
battery. Yet the footprint is smaller than a sheet of paper,
even with the built-in 30-sheet feeder.

The one for the road: a remarkably rugged portable.

But if you often print on the go, see the Kodak Diconix 180si printer. This is a true portable, incredibly light and compact, yet ruggedly reliable. Now you can print anywhere you can write, even at 40,000 feet! And it offers unbeatable value.

Wherever you work, don't wait: call for
the name of a dealer of Kodak printers
near you in the U.S. and Canada.

1 800 344-0006, Ext. 413.



Kodak Diconix
180si printer.
The rugged portable.



KODAK

Kodak Diconix printers

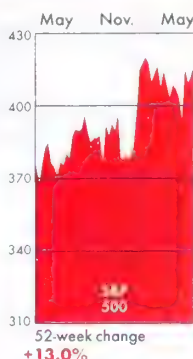


Investment Figures of the Week

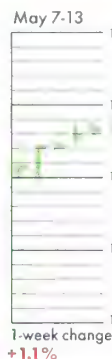
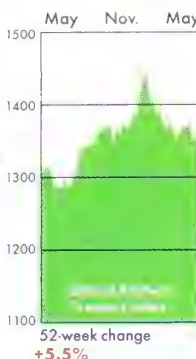
COMMENTARY

The U.S. economy is gaining strength, even as inflation is in check. That's good news for the financial markets. Fixed-income investors cheered the loudest. Bond prices rallied as interest rates dropped. The Dow industrials climbed, too, edging up near the 4000-mark. Other stock indexes, though, finished the week little changed. Overseas, the beleaguered Japanese market showed some life, picking up nearly 900 points, or 5%. London stocks continued to make gains, too.

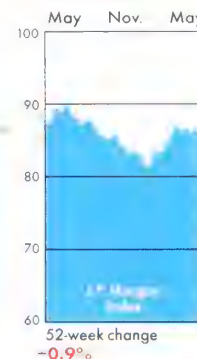
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

S. STOCKS

	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	3392.0	0.7	18.4
COMPANIES (Russell 1000)	220.1	-0.2	14.3
ALL COMPANIES (Russell 2000)	199.1	-0.0	17.5
COMPANIES (Russell 3000)	234.5	-0.2	14.5

FOREIGN STOCKS

	Latest	% change (local currency) Week	% change (local currency) 52-week
DOW JONES (FINANCIAL TIMES 100)	2720.5	0.8	10.6
DOW JONES (NIKKEI INDEX)	18,768.6	5.0	-27.3
DOW JONES (TSE COMPOSITE)	3404.2	1.3	-1.2

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.67%	3.69%	5.6%
30-YEAR TREASURY BOND YIELD	7.86%	7.97%	8.3%
S&P 500 DIVIDEND YIELD	2.96%	2.96%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.5	25.5	17.5

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	404.8	403.9	Positive
Stocks above 26-week moving average	56.0%	55.2%	Negative
Speculative sentiment: Put/call ratio	0.43	0.34	Neutral
Insider sentiment: Vickers sell/buy ratio	2.27	2.50	Neutral

INDUSTRY GROUPS

4-WEEK LEADERS

	% change 4-week	% change 52-week
MONEY CENTER BANKS	15.6	32.1
WELL EQUIPMENT AND SERVICES	13.7	-9.5
RAILROADS	13.3	46.8
ENGINEERING AND CONSTRUCTION	10.0	-7.7
MAJOR REGIONAL BANKS	8.3	37.7

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
MANUFACTURED HOUSING	-13.2	15.5
COMMUNICATIONS EQUIPMENT	-10.3	6.8
COMMERCE BUILDING	-10.2	17.1
MINING	-9.0	28.4
MACHINE TOOLS	-8.1	33.9

Strongest stock in group

	% change 4-week	% change 52-week	Price
CHASE MANHATTAN	30.2	61.2	29 5/8
BAKER HUGHES	20.7	-26.2	21 7/8
UNION PACIFIC	14.9	32.3	55
FLUOR	13.0	-8.7	43 1/2
WELLS FARGO	29.0	-3.7	84

Weakest stock in group

	% change 4-week	% change 52-week	Price
FLEETWOOD ENTERPRISES	-14.2	20.2	37 1/8
NORTHERN TELECOM	-11.9	8.6	39 5/8
PHM	-19.0	33.6	21 7/8
CAESARS WORLD	-17.8	49.7	31 1/4
ACME CLEVELAND	-24.6	0.0	6 1/2

BRIDGE INFORMATION SYSTEMS INC

MUTUAL FUNDS

LEADERS

	4-week total return	%
A UNITED KINGDOM SMALL COMPANY	11.4	
EQUITY STRATEGIES	10.5	
SELECT ENERGY SERVICE	9.8	

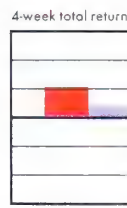
	52-week total return	%
SELECT REGIONAL BANKS	54.7	
SELECT AUTOMOTIVE	54.2	
SELECT SAVINGS & LOAN	47.9	

LAGGARDS

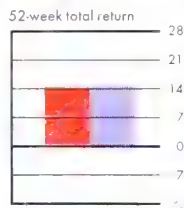
	4-week total return	%
SCHILD VALUE	-9.0	
SCHILD AGGRESSIVE GROWTH	-8.8	
USF&G AXE-HOUGHTON GROWTH	-7.6	

	52-week total return	%
STRATEGIC GOLD/MINERALS	-30.9	
DFA JAPANESE SMALL COMPANY	-29.6	
G. T. JAPAN GROWTH	-29.5	

S&P 500



Average fund



MORNINGSTAR INC

RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio.

Percentages indicate daily total returns.



U. S. stocks



Treasury bonds



Money market fund



Foreign stocks



Gold

-0.13%

+1.74%

+0.06%

+3.28%

-0.24%

DATA RESOURCES INC

Figures on this page are as of market close Wednesday, May 13, 1992, unless otherwise indicated. Relative portfolios include S&P 500 companies only; performance and share prices are as of market close.

May 12. Mutual fund returns are as of May 8. Relative portfolios are valued as of May 12. A more detailed explanation of this page is available on request.

HOW TO NARROW THE INCOME GAP

There's a lot of quibbling going on about the nature of income distribution in the U.S., but no matter how you slice it, the gap between the poor and rich got wider in the 1980s. Although liberals and conservatives argue over the exact numbers, nearly everyone agrees that America has become more unequal. In essence, the top 1% of families nearly doubled their share of aftertax income, receiving 12% in 1989, up from 7% in 1977, according to calculations by the Congressional Budget Office. At the bottom, the percentage of Americans below the poverty line rose from 11.7% in 1979 to 13.5% in 1990. And according to a just-released Census Bureau study, the number of working poor rose dramatically from 1979 to 1990.

The root of the widening income gap is America's ailing economy. Two decades of decline in U.S. global competitiveness has helped eliminate millions of manufacturing jobs. The continuing emphasis on financial assets created fortunes at the same time that U.S. corporations skimmed on new investment in plants and equipment. If this trend continues, it will threaten the very fabric of the American economy and society, as the recent unrest and looting in Los Angeles show all too disturbingly.

But though there's substantial agreement about the problem, there's political and intellectual gridlock about the solution. Generally speaking, liberals want to make the tax system more progressive and restore benefits for the poor cut during the Reagan years. Conservatives would much rather follow a market-oriented policy of enterprise zones, school choice, and individual responsibility. The warmed-over schemes disinterred by President Bush and Congress are O.K. as far as they go, but does anyone really believe, for example, that tax breaks will lure much new business into ghettos?

Congress and the Administration can best help the poor and middle class by adopting dramatic economic policies that strengthen the U.S. economy, thus creating jobs. The U.S. needs to create the conditions for broad-based economic growth by beefing up civilian R&D spending, boosting funds for repairing the nation's infrastructure, supporting education, and reforming the welfare system. That's the way to boost competitiveness, and a national competitiveness policy is by far the best way to narrow the income gap.

PROTECTIONISM STILL HAUNTS THE HILL

The Trade Expansion Act of 1992, introduced by Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.), is a mishmash of bills that have been sitting around Congress for a number of years. It's an attempt by the Democrats to codify their own trade platform just as President Bush's major trade initiative, the North American

Free Trade Agreement, is nearing completion (page 26). It almost certain to pass the House, but unless the Rostenkowski bill is substantially changed by the Senate, it deserves to die.

Laudably, it would streamline U.S. Customs procedures that everyone agrees badly need fixing. The bill would also put some teeth into efforts to force other countries to live up to their trade pacts with the U.S. The White House would be required to put more pressure on trading partners to open their markets to U.S. exports.

But the bill plays some preposterous election-year politics. It would try to force the Japanese into "voluntarily" limiting their automobile exports to the U.S. for seven years. And it would even count as exports the Japanese nameplate cars that are manufactured in Kentucky, Michigan, Ohio, and Tennessee.

Just as the White House has a good idea in wanting to expand the U.S.-Canada free trade zone to Mexico, so have the Democrats in their market-opening initiatives. But throwing a protective shield around Detroit is crass protectionism at its worst.

CLEANING UP THE SUPERFUND

In 1980, at the height of the concern over toxic wastes at the Love Canal near New York's Niagara Falls, Congress passed a sweeping measure designed to punish polluters and clean up the hundreds of hazardous waste dumps that dot the nation's landscape. The Superfund legislation was well-intentioned, but it has gone seriously awry, with costs over the next 30 years projected to approach \$750 billion (BW—May 11).

The record so far is abysmal. The federal government and companies together have spent \$11 billion, but only 84 of 1,245 worst sites have been cleaned up. Scientists are no longer even certain about how much of a threat the chemicals at the remaining sites pose. In some instances, researchers suggest the public may be better off if sites are left as they are, rather than disturbing them.

For the most part, of course, erring on the side of public health and safety is prudent. But there are better schemes than the Superfund. Far too much money has been squandered by legal fees for endless litigation over which companies should pay how much to recompense the Environmental Protection Agency for the cost of cleanups. Apportioning costs or blame is less important than cleaning up the sites that pose clear threats.

For that reason, BUSINESS WEEK supports a financing scheme that avoids assigning blame to specific companies while spreading the costs around. The federal government already imposes a tax on the chemical and petroleum industries on the theory that they were responsible for a good portion of the wastes at these dump sites. This notion should be extended to all industrial companies through either a direct tax or a tax on the waste their facilities generate. This mechanism would end the litigation and let the cleanup proceed.

NESS WEEK
June 1

0330706 4

BusinessWeek

IE 1, 1992 A McGRAW-HILL PUBLICATION \$2.75

INSIDE INTEL

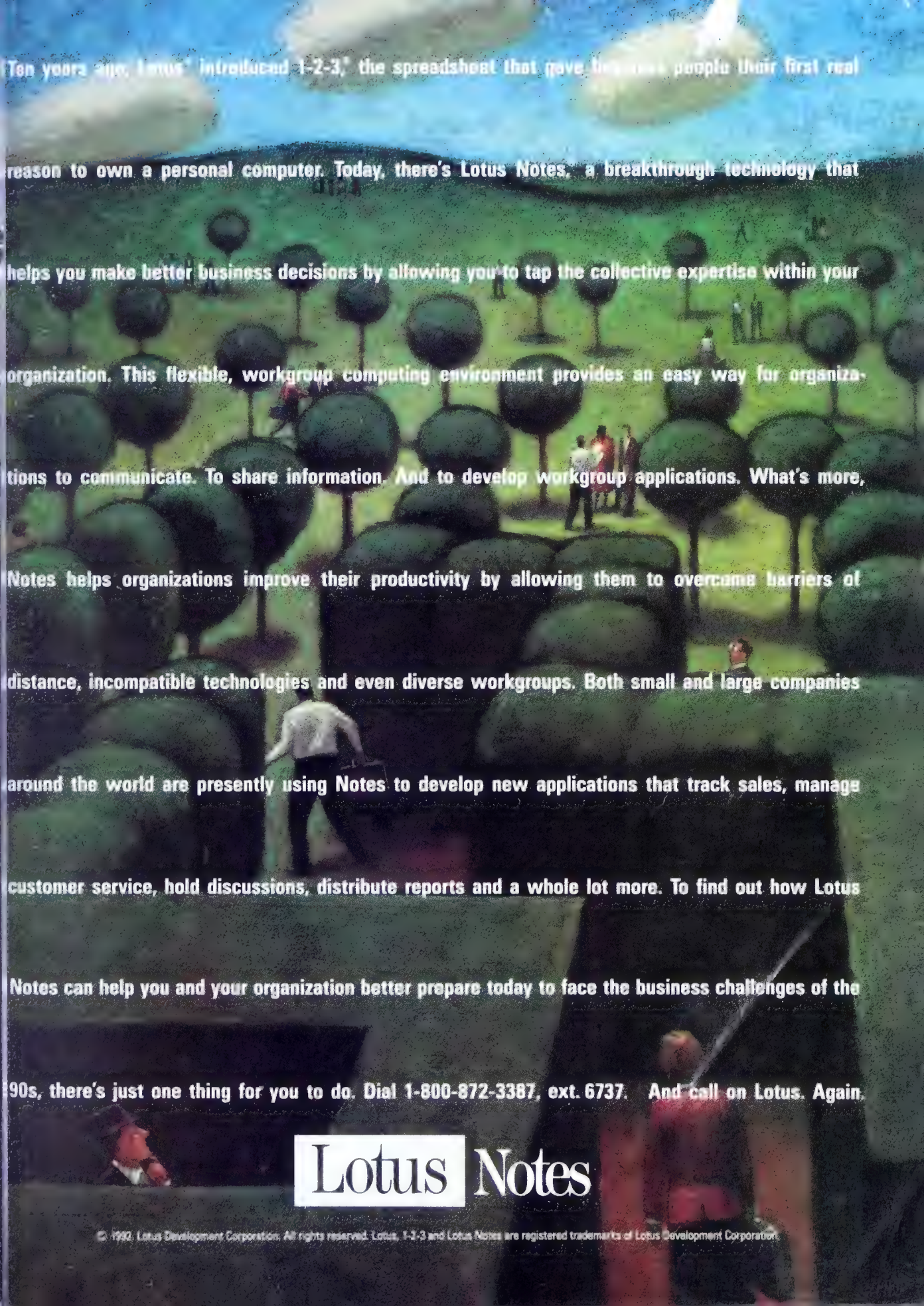
BURLINGAME
MAY 20 1992
LIBRARY

THE WORLD'S PREMIER
CHIP COMPANY
IS FACING FIERCE
COMPETITION.
CEO ANDY GROVE'S
PLAN: BRING OUT
NEW GENERATIONS
OF CHIPS IN
HALF THE TIME.



*****5-DIGIT 94010
0602 105811160 DEC92 T03 2169
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA 94010-4083

LOTUS
GIVES YOU
A BETTER
WAY TO
WORK.
AGAIN.



Ten years ago, Lotus[®] introduced 1-2-3,[®] the spreadsheet that gave business people their first real

reason to own a personal computer. Today, there's Lotus Notes, a breakthrough technology that

helps you make better business decisions by allowing you to tap the collective expertise within your

organization. This flexible, workgroup computing environment provides an easy way for organiza-

tions to communicate. To share information. And to develop workgroup applications. What's more,

Notes helps organizations improve their productivity by allowing them to overcome barriers of

distance, incompatible technologies and even diverse workgroups. Both small and large companies

around the world are presently using Notes to develop new applications that track sales, manage

customer service, hold discussions, distribute reports and a whole lot more. To find out how Lotus

Notes can help you and your organization better prepare today to face the business challenges of the

90s, there's just one thing for you to do. Dial 1-800-872-3387, ext. 6737. And call on Lotus. Again.

Lotus Notes

YOU FIGHT THIS CONSTANTLY FISCALLY RESPONSIBLE AND CONSIDER THIS

Today, the idea of spending thousands of dollars more on a luxury sedan for the cachet of having a hood ornament appears hopelessly unjustified.

No, these are the nineties, an era of renewed sensibilities. And instead of driving a sedan that demonstrates how wealthy you are, many of you are electing to drive



We believe some things in a luxury car should never be considered a luxury, like the safety of its occupants. Which is why the Maxima GXE offers such items as optional ABS brakes, optional driver's side airbag and a Digital Touch Entry System

Maxima GXE shown in Pebble Beige Metallic with Luxury and Leather Trim Packages, driver's side airbag and ABS brakes



BATTLE BETWEEN BEING REWARDING YOURSELF.

TRUCE.

edan that shows how smart you are.

The Nissan® Maxima® GXE.

It offers all the amenities you would expect to find in sedans costing twice as much: including a Digital Touch Keyless Entry System, air conditioning, power windows and door locks, AM/FM cassette with Dolby®, a sophisticated theft deterrent

system and optional equipment, such as a power sunroof, 4-way power adjustable driver's seat, compact disc player and seating surfaces appointed in leather.

Of course, what's under the hood is no less impressive. There you'll find a sequential, multi-point, fuel-injected 160 horsepower V6 that will ensure our interior doesn't make you too sedate.

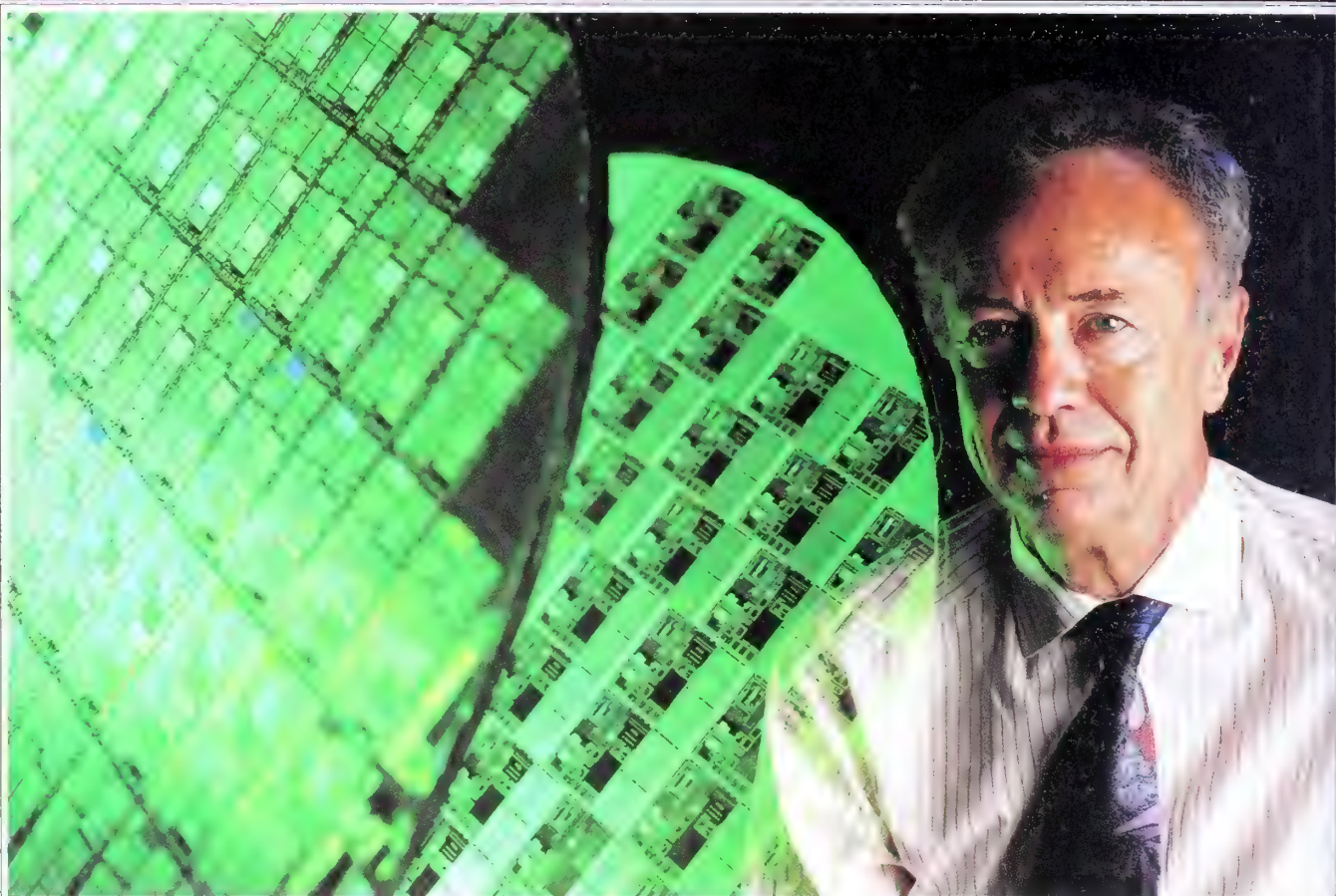
If all of this is making the rational, right-side of your brain start to protest, consider that our '89 GXE has retained more of its original suggested price than either the '89 BMW 525i or the '89 Acura Legend Sedan.*

All of which suggests the only inner battle you'll have to face now is what color to pick.



BUILT FOR THE
HUMAN RACE.®





"SPEED IS THE ONLY WEAPON WE HAVE": INTEL CEO ANDY GROVE INTENDS TO INTRODUCE NEW CHIP FAMILIES EVERY TWO YEARS IN THE '90s

Cover Story

86 INSIDE INTEL

When you're No. 1, speed is of the essence. Sure, Intel's chips are in 100 million computers. And yes, sales have soared since 1986. But CEO Andy Grove understands that the company is 'under attack.' Rivals are denting the bottom line. Customers are struggling. Investors are worried. But Grove has a plan: Get more products to market, faster

90 THE 'OTHER' INTEL

It's producing a lot more than chips

94 A CHIP BATTLE ROYAL

It ain't over till it's over

Top of the News

26 CAN O&Y ESCAPE?

The developer may not be too big to fail, after all

28 ROOM AT THE TOP

And just about everywhere else in commercial real estate

29 HIGH-RISE HEADACHES

JMB Realty rode O&Y's coattails to success, but it's sweating now

30 TRAILING A VALUE-HUNTER

An SEC inquiry into trading by Mutual Series chief Michael Price

31 COMMENTARY

Let's get some guidelines for foreign defense sales

32 THE STATES' SORRY STATE

They are facing massive deficits, and recovery won't help much

33 WILKOMMEN, Y'ALL

Spartanburg, S. C., is going all out to woo a huge new BMW factory

34 STRETCHING A BUCK

The case against Value Merchants

35 REBOUND FOR CRAY RESEARCH?

Rollwagen says: 'I'm very optimistic'

38 TEMPEST IN A B-SCHOOL

Rochester's dean quits over funding

40 IN BUSINESS THIS WEEK

Japanese minivans, GM's offering, a scare at Xerox, the New York Yacht Exchange, Pepsi pizza, Macy's

International Business

46 EUROPE

From London to Zurich, there's a 'steady creep out of the doldrums'

47 BRAZIL

Bunge & Born's new leader vows to untangle management

48 COMMENTARY

Prague's rush toward capitalism may be a model for its neighbors

51 INTERNATIONAL OUTLOOK

Thailand's 'Tiananmen' could derail the country's go-go economy

Economic Analysis

16 ECONOMIC VIEWPOINT

Blinder: Did you hear the one about the balanced budget?

20 ECONOMIC TRENDS

Small business, exchange rates, factory orders fall, bond yields drop

23 BUSINESS OUTLOOK

Recovery bounces down the runway



1 **RIISING FROM THE ASHES OF L.A.:**
'IT'S IMPORTANT WE SEND THE
MESSAGE THAT THIS IS A GOOD PLACE
TO DO BUSINESS,' SAYS BROADWAY
FEDERAL S&L CEO PAUL HUDSON



114 **BACK-ROADS EUROPE:**
SOUTHERN FRANCE ON TWO WHEELS,
CATALONIA'S HIDEAWAYS, ALPINE
CLIMBING, AND RURAL TUSCANY



26 **PAUL REICHMANN'S NEW REALITY:**
HE AND HIS BROTHERS SEEM SURE TO
LOSE SOME OF THEIR REAL ESTATE
EMPIRE TO LENDERS. THE QUESTION IS:
HOW MUCH WILL THEY RETAIN?

Government

- 3** **WASHINGTON OUTLOOK**
Quayle is taking Bush right—
and maybe right into trouble
- 3** **THE HILL'S YOUNG TURKS**
How two bands of congressmen are
shaking up the House

The Corporation

- 2** **ENDANGERED NORTHERN BIRDS**
As their losses mount, Canada's two
global airlines must look seriously at
merging with U. S. carriers
- 4** **A NICKEL AT A TIME**
TRM's cut-rate photocopying service
is making millions

Marketing

- 5** **ROCK ON A ROLL**
With blue-collar roots and snob
appeal, Rolling Rock is a gold mine

People

- 3** **SOUTH CENTRAL STORY**
The Hudson family will rebuild its
torched S&L—of course

Science & Technology

- 2** **GM GOES FULL TILT**
Lordstown spearheads the shift to
flexible, round-the-clock plants
- 5** **DEVELOPMENTS TO WATCH**
Computer anatomy, flu vaccine for
infants, electric-car batteries,
anticancer drug, condensed eggs

Information Processing

- 98** **AMERICA CALLING**
Deregulation hits European
telecommunications, and U. S.
companies come running

Finance

- 102** **SWAP FEVER**
The market now eclipses the value of
all the shares on the New York and
Tokyo stock exchanges combined
- 106** **JUDGMENT OF SALOMON**
The SEC won its case but didn't
uncover any surprise violations



82 **OPEN ALL NIGHT:**
GM'S LORDSTOWN (OHIO) PLANT IS
MOVING TO 24-HOUR PRODUCTION,
WITH RETRAINED WORKERS
AND REDESIGNED SMALL CARS

108 THE TURN OF THE SCREW

Beware the clause that can wipe out
interest on convertible bonds

110 INSIDE WALL STREET

A battle over the maker of Dirt Devil
Champion: About to be a champ?
Mego tries on a finance hat

121 INVESTMENT FIGURES OF THE WEEK

Media

112 TIME WARNER'S FRONTIERSMEN

The three men charged with making
a global, multimedia empire

Personal Business

114 COUNTRY PLEASURES

FRANCE: Landscape with bicycle
SPAIN: Far from Olympic crowds
SWITZERLAND: Up the Matterhorn
ITALY: Vineyard bed-and-breakfast

Features

6 BUSINESS WEEK INDEX

6D LETTER FROM EAST HAMPTON

7 READERS REPORT

9 CORRECTIONS & CLARIFICATIONS

14 BOOKS

Burrough: *Vendetta*
Smith: *The Nippon Challenge*

119 INDEX TO COMPANIES

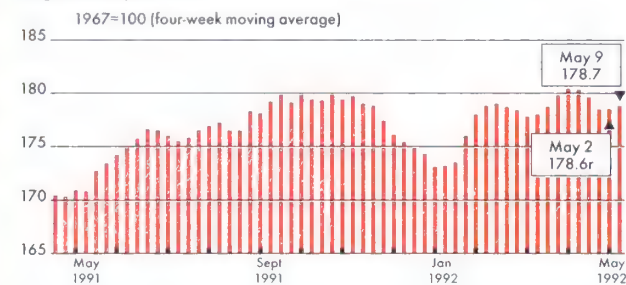
122 EDITORIALS

Swaps: A market that needs sunlight
Intel puts its money on the future
It's time for cities to restructure

BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 4.6%

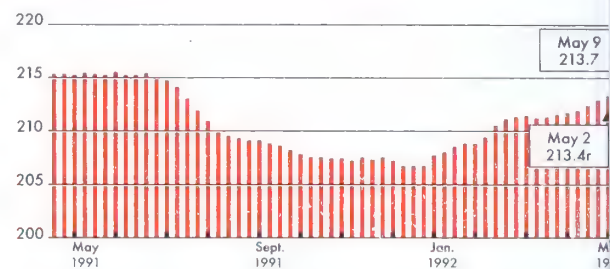


The production index was virtually flat during the week ended May 9. On a seasonally adjusted basis, truck, coal, and steel output increased, while production of lumber, crude-oil refining, paper, and paperboard declined. Auto and electric power output and rail-freight traffic were unchanged from the previous week. Before calculation of the four-week moving average, the index dropped to 179.4, from the prior week's reading of 179.6.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: 0.1%
Change from last year: -0.8%



The leading index was little changed in the week ended May 9 as the continued deterioration of the growth in the money supply overshadows changes in the other indicators. Besides M2, the growth in materials prices and business failures was also negative and offset higher stock prices, slightly lower bond yields, and improvement in the change in real estate loans. Before calculation of the four-week moving average, the index stood at 214, down from 214.1.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/16) thous. of net tons	1,749	1,815#	11.3
AUTOS (5/16) units	136,192	135,248r#	5.7
TRUCKS (5/16) units	93,698	87,300r#	19.0
ELECTRIC POWER (5/16) millions of kilowatt-hours	53,489	51,826#	-5.5
CRUDE-OIL REFINING (5/16) thous. of bbl./day	13,758	13,155#	2.9
COAL (5/9) thous. of net tons	18,367#	18,309	-0.4
PAPERBOARD (5/9) thous. of tons	802.4#	828.1r	11.8
PAPER (5/9) thous. of tons	756.0#	781.0r	3.4
LUMBER (5/9) millions of ft.	486.7#	502.6	-3.0
RAIL FREIGHT (5/9) billions of ton-miles	20.4#	20.5	11.5

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPAA, SFPAA, Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/20)	129	130	138
GERMAN MARK (5/20)	1.60	1.62	1.71
BRITISH POUND (5/20)	1.83	1.81	1.74
FRENCH FRANC (5/20)	5.38	5.45	5.80
CANADIAN DOLLAR (5/20)	1.20	1.21	1.15
SWISS FRANC (5/20)	1.47	1.50	1.45
MEXICAN PESO (5/20) ³	3,085	3,071	3,002

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/20) \$/troy oz.	336.950	335.200	-5.6
STEEL SCRAP (5/19) #1 heavy, \$/ton	91.95	91.95	-3.2
FOODSTUFFS (5/18) index, 1967=100	203.3	202.3	0.1
COPPER (5/16) c/lb.	105.1	104.1	0.7
ALUMINUM (5/16) c/lb.	60.0	60.1	1.7
WHEAT (5/16) #2 hard, \$/bu.	3.90	4.02	27.9
COTTON (5/16) strict low middling 1-1/16 in., c/lb	56.51	55.73	-33.7

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/15) S&P 500	414.89	416.49	1.4
CORPORATE BOND YIELD, Aaa (5/15)	8.27%	8.35%	-0.1
INDUSTRIAL MATERIALS PRICES (5/15)	97.7	97.7	0.0
BUSINESS FAILURES (5/8)	453	422	7.3
REAL ESTATE LOANS (5/6) billions	\$404.4	\$403.3r	-0.3
MONEY SUPPLY, M2 (5/4) billions	\$3,424.2	\$3,444.8r	-0.6
INITIAL CLAIMS, UNEMPLOYMENT (5/2) thous.	424	414r	-2.4

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
HOUSING STARTS (Apr.) annual rate, thous.	1,115	1,344r	10.1
INDUSTRIAL PRODUCTION (Apr.) total index	108.2	107.6r	0.6
CAPACITY UTILIZATION (Apr.)	78.7%	78.4%r	0.3
CONSUMER PRICE INDEX (Apr.)	139.5	139.3	2.1

Sources: Commerce Dept., Federal Reserve Board, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/4)	\$951.7	\$941.2r	1.1
BANKS' BUSINESS LOANS (5/6)	287.5	286.6	-1.1
FREE RESERVES (5/13)	389	1,122r	-4.4
NONFINANCIAL COMMERCIAL PAPER (5/6)	147.3	145.8	6.0

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (5/19)	3.80%	3.75%	5.7%
PRIME (5/20)	6.50	6.50	8.2
COMMERCIAL PAPER 3-MONTH (5/19)	3.82	3.85	5.0
CERTIFICATES OF DEPOSIT 3-MONTH (5/20)	3.73	3.76	5.0
EURODOLLAR 3-MONTH (5/16)	3.78	3.85	5.0

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

YOU'RE THE
BOSS.
YOU TELL THEM
WHERE TO GO.

B E R M U D A

Tear this out. And pass it to your trusted meetings planner. Because holding a meeting on our island gives you the same tax benefits as if you held it in the U.S. Hotels cost about the same. And we're less than two hours from the East Coast.

What's more, our inspiring scenery is certain to inspire great thinking.

Have your planner call Dianne Carlson at 800-223-6106 Ext. 213 for all the rosy details.

Letter From East Hampton



EAST HAMPTON AIRPORT: A BROUHAHA ERUPTED WHEN MORT ZUCKERMAN'S PLANE HIT A BUCK

WHERE THE DEER AND THE NOUVEAU RICHE PLAY

As an orange twilight sun shimmers over the potato fields on an early-summer Friday afternoon, the Long Island town of East Hampton, 95 miles east of New York, begins its transformation from a hibernating country hamlet into a retreat for the rich and famous and their wannabes.

Between Memorial Day and Labor Day, the town's population swells five-fold, to some 75,000. Starting in Wainscott just west of the Village of East Hampton, the township stretches to the bluffs of Montauk. In between, all manner of summer people descend. Particularly then, there is friction between conservationists and developers, tradespeople and executives, locals and city folk, have-nots and have-a-lots. "Everyone out here has his own definition of the word bucolic," explains Town Supervisor Tony Bullock, 34. Put up a house, and a citizen's group is formed. It seems there's a committee to save anything and everything.

CELEB OVERLOAD. The back roads out here have signs saying: "Caution: Turtle crossing." Revlon Chief Executive Ronald Perelman tried to import a Greek Revival church and met with staunch opposition from neighbors, who said the steeple would ruin the landscape. When actress Faye Dunaway wanted to put in a swimming pool, village officials turned her down, saying it would endanger nearby wetlands. Others may bow and scrape to celebrities, but not here.

The freshest metaphor for the human condition out here is the local airport,

where the lazy, off-season traffic of Cessnas and Pipers gives way to the weekend influx of Gulfstream IVs, Astras, and Lear's. While ordinary folk brave the infamous Long Island Expressway, the rich fly to East Hampton. Jann Wenner rolls in on the *Rolling Stone* plane; Time Warner Chairman Steve Ross commutes on his company jet, as does Mortimer Zuckerman, real estate magnate and publisher of *U.S. News & World Report*.

Late last year, Zuckerman's plane clipped a deer, causing \$30,000 worth of damage to the craft. The pilot duly informed the Federal Aviation Administration of the hazardous runway conditions. Zuckerman appeared at a town hearing to suggest a solution to his problem: Prior to his landings, his car could do reconnaissance on the strip. The idea was not embraced. "Where else in America, except in the Hamptons, can someone seriously suggest having his chauffeur drive a limo up and down a runway?" marvels former town Council-

man Tom Rühle. By January, Senator Alfonse M. D'Amato (R-N.Y.), who has some clout on the Senate transportation subcommittee, announced that he had found \$213,300 in federal funds for a 7,500-foot-long deer fence at the airport.

Since the fence won't completely enclose the airport, even the pilots think it's a laughable solution to the problem—if, indeed, there is a problem. Over the years, there have been only a half-dozen cases of deer on the runway during takeoffs and landings, according to the airport manager. There have been no injuries. At Calverton, about an hour's drive from East Hampton, where there's a much bigger airport, there is extensive fencing, and the deer still forage on taxiways and runways. The East Hampton fence, although not yet built, is known as "Mort's folly."

D'Amato simultaneously announced that an additional \$415,800 had been earmarked for a new terminal building at the airport. Although this is not a new idea, it is, predictably, controversial.

UNDERWHELMED. Three years ago, a new building was considered a *fait accompli*. Nearly everybody agrees the current structure, built as an Army barracks and then moved to the airport in the 1940s, is an embarrassment. The waiting-room floor lists, and the decor consists of a rotting rattan coffee table and year-old magazines. The linoleum floors look as though it hasn't been washed since Donald Trump closed his short-lived helicopter service—\$199 each way from Manhattan—a few seasons ago.

So in 1989, East Hampton held an architectural competition to choose a design for a modern terminal. When the finalists' mock-ups were unveiled on Saturday afternoon at a local community house, the townsfolk, not to mention the town council, were underwhelmed. Some proposals were futuristic—giant strips of glass with propeller sculptures. Others were earthier—but most were considered too refined, too slick, or too big for a little country airport. Instead of going ahead with the contest-winning design, by architectural firm Smith & Johnson, a referendum was held. By two-to-one margin, citizens rejected it. Smith & Johnson then sued the town for breach of contract, albeit unsuccessfully. It has filed an appeal.

Now, the airport building project is on again—shrunk from 4,000 square feet to 2,500. And 27 architects are hopeful for the job, including Smith & Johnson, which will drop its lawsuit if chosen. How is the town going to select an architect? "Very carefully," says Bullock.

DOUG GARR

Doug Garr has lived part-time in East Hampton since 1985.





This is a moment for a Macanudo.

A tennis player's moment to remember has a way of replaying itself in the mind again and again for a lifetime.

And whether you happen to be an A player or a C player, there is always one unforgettable shot that put the finishing touch on a match you had never expected to win.

Such moments to remember are made for a Macanudo cigar. For in an age when speed is all too often the order of the day, the men of Macanudo still take more than two years to turn the finest tobaccos in the world into cigars made entirely by hand.

Just so you can let any moment worth savoring linger on and on with all the taste and aroma of the ultimate cigar.



If you have time to do extensive research on worthwhile investments, read this.

We'd like to tell you about one of the best kept secrets in the world of business. Freddie Mac. You may recognize the name, but you probably don't know who we are or what we do. Read on. The facts will surprise you.

First, Freddie Mac is a publicly held corporation. We're listed on the New York Stock Exchange (FRE), and like all successful corporations, we work hard to be efficient and competitive. (See the box below to find out our ranking.)

FRE

Freddie Mac buys home mortgages from lenders, packages them in the form of securities, and sells the securities to investors. This creates a continuous flow of funds, which in turn makes mortgage financing more available and more affordable. That's how we've been helping more Americans to buy homes for 21 years. It's a rewarding business to be in.

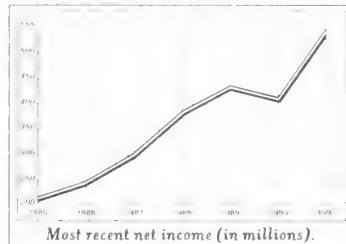
It's also rewarding for investors. In

1991, our net interest margin (revenue base) was approximately \$1.5 billion. Our net income was \$555 million. And our

return on book equity has been more than 20% for ten straight years. Which brings us to the bottom line.

Freddie Mac has earned a profit 21 years in a row. Of course, we'd be happy to send you more information.

Just write to us at 8200 Jones Branch Dr., Mail Stop 405, McLean, VA 22102. 📧



If you're in a hurry to learn about a terrific investment, read this.

We'll make this quick. The terrific investment is Freddie Mac.

Freddie Mac is a publicly held corporation, listed on the New York Stock Exchange (FRE). We rank 12th on the FORTUNE list of the 50 Largest Diversified Financial Corporations.

Here's what we did to make it to the top of the list. Freddie Mac purchases home mortgages

and packages them as securities to sell to investors. This keeps mortgage money flowing, so financing is more available and more affordable. Our business helps more Americans to own homes. And in the process, Freddie Mac has earned a profit for 21 straight years. Have we piqued your interest? There's more information above. 📧

If you're about to turn the page, read this.

Freddie Mac has earned a profit 21 years in a row. Maybe you should read the rest of the page. 📧

STEADY FREDDIE
Freddie Mac
THE IDEA BEHIND ONE IN EIGHT AMERICAN HOMES.

EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: John A. Dierdorff
DEPUTY MANAGING EDITOR: William Wolman
ASSISTANT MANAGING EDITORS:
 Robert J. Dowling, Mark Morrison, G. David Wallace
ART DIRECTOR: Malcolm Frouman
SENIOR EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, Judith H. Dobrynski, Mark Frons, Geoff Lewis, Gino Scotti, Mark N. Vamos, Lee Walczak (Washington), Chns Welles, Seymour Zucker
EDITORIAL PAGE EDITOR: John E. Pluenncke
CHIEF OF CORRESPONDENTS: Keith G. Felcyn
INTERNATIONAL EDITION: William J. Holstein (Editor), Elizabeth Weiner (Sr. Editor)
ENIOR WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis (Chicago), William Glasgall, Gene G. Marcial, Bruce Nussbaum, John Pearson, Karen Pennar, Otis Port
ASSOCIATE EDITORS: Duane E. Anderson, Catherine Arnst, Andre A. Depke, Amy Dunkin, Peter Finch, Jeffrey M. Adelman, William D. Marbach
EDITOR, EDITORIAL OPERATIONS: Thomas J. Reed
PICTURE EDITOR: Lawrence Lippmann
EDITORIAL ART DIRECTOR: Laura Baer
DIRECTOR OF SYSTEMS: Claire Conte Worley
ECONOMICS: James C. Cooper (Sr. Economist/Business Outlook editor), Kathleen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel (Economic Trends editor), Gene Koretz (Economic Trends editor)
DEPARTMENT EDITORS: Books: Denise Demong, Corporate Finance: Larry Light, Industries: Thane Peterson, Information Processing: John W. Verly, International Edition: Joyce Barnathan, International News: Peter Galuszka, Stanley Reed, Investment Banking: Leah Nathans Spiro, Legal Affairs: Michele Galen, Marketing: Christopher Power, Markets & Investments: Gary Weiss, Media: Mark Landler, Money & Banking: John Meehan, News: Brian Collingwood, People: Michael O'Neal, Personal Business: Donald H. Dunn, Joan V. Warner, Science: Emily T. Smith, Sports: Fred F. J. Jaspers, Social Issues: Troy Segal, Technology: Robert Buder, Telecommunications: Peter Coy, Transportation: Andrea Rothman, The Workplace: Aaron Bernstein
AFF EDITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill II, Aurel Touby, Suzanne Woolley, Laura Zinn, Paul M. Eng (Asst. editor)
DEPUTY EDITORS: Harry Maurer (Deputy chief), Prudence Crowther, Michael Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack Robbins, Jim Taibi (Sr. copy editors), Pam Black, Carl Desens, Hardy Eben, Aleta Kaufman, Cynthia McClean, David Pengilly, Malka Percal, Jugg Royalty, Gail Fowler, Dalia Kandiyoti, Ada Rosano, Eva Stettner (researchers)
PRODUCTION COPY EDITORS: Donald Halsband (Chief), Hallberg, Almondson, Celine Keating, Robert S. Norman, Lawrence Dark, Ephraim M. Romanoff
DEPUTY DIRECTOR: Steven Taylor (Deputy director), Cynthia Friedman, Francesca Messina, Jay Petrow (Assoc. directors), Alice Cheung, Craig Socia (Sr. directors), Graphics: Arthur Eves (Director), Joan Danaher (copy director), Rob Doyle (Sr. Illustrator), Laurel Dauris, Peter Mena, Ray Vella (Illustrators), Jaime Beauchamp (Computer text), Production: Stephen J. Romeo (Mgr)
EDITORIAL OPERATIONS: Richard Balestino, A. Peter Clem, Yvonne Rodriguez (Production managers), Thomas R. Dowd, Sharon E. Jones, Jose L. Martinez, Jane M. Parkinson, Craig Sturges, Karol, Ilse V. Walton, Nicholas White (Makeup editors), Dale I. Arnold, Ilix Lindley, Edgardo Torres (Asst. makeup editors), Donald Carson (Traffic manager), Bruce M. Arnold, Leo Corbie (Production staff)
RESPONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walecia Konrad, Boston: Gary McWilliams, Geoffrey Kelly, Chicago: David Greising, copy Mgr.), Julia Flynn, Kevin Smith, Los Thermen: Cleveland: Chary Schiller (Mgr.), Connecticut: Lisa Dinscoul, Dallas: Wendy Miller (Mgr.), Stephanie Anderson Forest, Detroit: Kathleen Kerwin, James B. Treece (Sr. Correspondent), David Woodruff, Los Angeles: Ronald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), Schine: Miami: Gail DeGeorge (Mgr.), Philadelphia: Joseph H. (Mgr.), Pittsburgh: Michael Schroeder (Mgr.), Maria Mallory, Francisco: Russell Mitchell (Mgr.), Richard Brandt, Joan O'Connell, Robert Hof, Kathy Rebello, Seattle: Don Jones Yang (Mgr.), Washington: Stephen H. Wildstrom (Sr. News Editor), Stan Crook, eds Editor), Amy Borus, Brian Bremner, John Carey, Paula Dwyer, an Foust, Susan B. Garland, Howard Gleckman, Douglas Hawbrecht, Ter Hong, Mark Lewyn, Paul Magnusson, Mike McNamee, Tim Hart, Catherine Yang, Christina Del Valle (Asst. editor), Bonn: John Mpleman (Mgr.), Gail Schares, Hong Kong: Pete Engard, London: Richard A. Meicher (Mgr.), Mark Maremont, Mexico City: Stephen Baker (Mgr.), Moscow: Rose Brady (Mgr.), Paris: Stewart J. (Mgr.), Bill Javetski, Jonathan B. Levine, Rome: John Rossant, Tokyo: Robert Neff (Mgr.), Neil Gross, Ted Holden, Karen Wry Miller, Toronto: William C. Symonds (Mgr.)
EDITORIAL SERVICES: Broadcasting: Ray Hoffman, Business Manager: Barbara Boynton, Information Services: Jude T. Hayes (editor), Judi Crowe (Asst. editor), Fred Katzenberg, Eliza S. K. Xuanlin Soong, Office Manager: Roselyn Kopit, Public Relations: Christine Summerson, Josephine Coppola, Readers Report: nobia Brown, Reprint Permission: Lawrence Clayton, Systems: L. Kichen (Mgr.), Ron Brayer, Courtenay Eddy
DESIGNER: John W. Patten
VP, OPERATIONS: Gary B. Hopkins
VP, ADVERTISING SALES: Karl A. Spangenberg
INTERNATIONAL: Greg Henske
CIRCULATION: Kitty Carroll Williams
DIRECTOR OF MARKETING: Cara Enckson
SALES: Constance E. Bennett (San Francisco), G. Jarvis Coffin (Atlantic Region), Dan Dunn (Chicago), Molly F. Ford (Northeast Region)
CONTROLLER: Gary M. Singer
RECTOR, ADVERTISING BUSINESS: Linda F. Carvalho
RECTOR, PRODUCTION: Mano J. Talluto

STRANGE TURNS IN THE SEARCH FOR EXCELLENCE

Your story "A big company that works" (Cover Story, May 4) is a landmark. Twenty-five years ago, John Kenneth Galbraith wrote: "A benign providence... has made the industry of a few large firms an almost perfect instrument for inducing technical change." Now, BUSINESS WEEK finds it cover-worthy when any big company measures up—hey, you even felt the need to add an exclamation mark to make sure we'd get the point!

Tom Peters
Palo Alto, Calif.

Wonderful company, Johnson & Johnson. While you are lauding their management, would you do a reader one big favor? Try opening a Band-Aid. Try pulling the red thread until it's dead. If these guys are so smart, how come we've never been able to open a Band-Aid without using a scalpel?

Sanford F. Wolin
Miami

WASTE COMPANIES: OUR BOOKS ARE BY THE BOOK

The suggestion that our accounting is questionable is untrue and terribly unfair to our people and stockholders ("Burying trash in big holes—on the balance sheet," Finance, May 11).

The story states that Waste Management Inc. "bumped up earnings by 6.8%" last year by including \$53.5 million in gains from subsidiary stock sales, which you state are "usually reflected on the parent's balance sheet." The SEC specifically allows such gains to be included in income, and has since the early 1980s. The rule is, once you elect to handle any such gain as income—rather than equity—you must handle all such gains as income, to be consistent. That decision was made six years ago, with the initial public offering of our Chemical Waste Management Inc. subsidiary.

Many companies handle these gains just as Waste Management did. Our accounting method is not only proper but we believe it is the most meaningful pre-

sentation in our circumstances. The combination of gains on stock transactions and gains recognized on the exchange of our Exchangeable LYONS was \$53.5 million in 1991 and \$52.7 million in 1990. The difference is not much of a "bump" for a company with \$600 million in net income.

You question our use of "pooling of interest" accounting and suggest that this approach, too, was done at our election. Pooling is frequently used by many companies to account for acquisitions. And contrary to the magazine's suggestions, we do not do it at our election. If a transaction meets the criteria, it must be accounted for as pooling.

You further state that by using poolings, Waste Management can "book a unit's entire year's sales and earnings, even if the purchase was on the fiscal year's last day." We do not record any sales and earnings of acquired companies prior to date of acquisition. Note 2 in our 1991 annual report clearly states that "acquisitions which otherwise met pooling-of-interests criteria were not significant in the aggregate and consequently prior-period financial statements were not restated."

Citing two institutions, you say that "investors seem wary of Waste Management's moves." Institutional ownership of Waste Management actually has grown in the last year, and the number of institutions owning Waste Management is nearly double the level of 1990. Further, you state that Janus Capital Corp. has unloaded its entire Waste Management stake in recent weeks. They also purchased a large block of stock in our newly public international subsidiary, Waste Management International PLC.

James E. Koenig
Vice-President & CFO
Waste Management Inc.
Oak Brook, Ill.

Your article made a vague and misleading reference to Ogden Projects Inc.'s accounting for unbilled receivables, which reflects merely the accrual of the principal component of the debt service on our municipally sponsored waste-to-energy facilities. OPI provides waste-disposal services to client communities under long-term service agree-

BUSINESS WEEK
JUNE 1, 1992 ***3268
ISSN 0007-7135



Published weekly except for one issue in January, by McGraw-Hill, Inc. Founder James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: (212) 512-2000. Domestic Telex: 127960, International Telex: 232365. Cable: McGraw-Hill New York. TWX: 710-581-4879. U.S. subscription rate \$44.95 per year; 2 years, \$74.95; 3 years, \$99.95. Single copies, \$2.75. Write for rates in other countries. Business Week Subscriber Services: 1-800-635-1200.

PHOTOCOPY PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill Inc. is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN 0007-7135/92/\$2.75

European Circulation Center, McGraw-Hill House, Maidenhead, Berks, England. Telephone: (0628) 23431, Telex 848640. Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9010. Registered for GST as McGraw-Hill, Inc. GST #R123075673. Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Dionne, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw III, Executive Vice President, Frank D. Penglase, Senior Vice President, Treasury Operations.

You can't watch it all.



But now you won't miss a thing.



Journal Graphics' Satellite Delivery Service gives you the late-breaking CNN news you need to react swiftly to financial opportunities, public relations problems and other news that affect your business.

This complete clipping system sends transcripts of news and public affairs programs directly to your computer within one to three hours of broadcast.



And you can customize the service simply by requesting only the categories that impact your company's interests.

Journal Graphics transcribes all CNN-produced programming, 24 hours a day, 7 days a week.

Call toll free 1-800-825-5746 now, and find out how to get your hands on CNN news transcripts.

CORRECTIONS & CLARIFICATIONS

In the Corporate Scoreboard (May 18), we misstated the change in Federated Department Stores Inc.'s fourth-quarter sales. Its sales of \$2,134 million were down 6%. The introductory story ("Turning the corner, an inch at a time") and table should have pointed out that results for Federated and Woolworth Corp. were for their fiscal fourth quarters ended Feb. 1 and Jan. 25. Both reported net losses because of large restructuring charges. Since the Scoreboard went to press, Federated and Woolworth have reported higher earnings for fiscal first quarters ended May 2 and Apr. 25.

ents for periods of 20 years or longer. The typical agreement requires the client community to pay fixed service fees for the entire contract term. For facilities owned by OPI, the service fees typically include, among other things, an explicit component for debt service on project indebtedness. Under such service agreements, OPI receives the debt-service component, including principal payments, of its service fees pursuant to schedules that coincide exactly with debt-service payments due on the underlying project indebtedness. Payment of debt service by the community is a fixed obligation, not dependent upon bringing waste to the facility.

OPI follows generally accepted accounting principles (GAAP) for accrual-basis financial statements and, accordingly, service-fee revenues, including the principal component of debt service, are recognized as earned throughout the term of the agreement as services are performed, notwithstanding that certain principal payments are received intermittently over the term of the service agreement. To the extent that there is a deferral of payment by the community, the amount of revenue recognized is reduced to take into account the time value of money.

Moreover, we resent being categorized blindly as a company that is "adventurous" in its accounting practices. OPI's accounting practices are dictated by GAAP, and all information is clearly and publicly disclosed in our annual reports, which are audited by our well-respected accounting firm, Deloitte & Touche.

Scott G. Mackin
President & COO
Ogden Projects Inc.
Fairfield, N.J.

Editor's note: Our story was correct in pointing out that the waste industry

Our health care cost containment specialists save employers

and insurers more than \$1 billion a year.

We get paid for results.®

CIGNA

CIGNA COMPANIES • PHILA., PA 19192



"Yeah, sometimes the going gets rough – but, just like the Berger Funds, we know we'll get there safely."

We are very happy to show you our past performance – and even more to tell you about our investment philosophy, which is designed to enable our investors to both eat well and sleep well. For a prospectus on the no-load Berger 100 and Berger 101 Funds, call (800) 333-1001. Please read prospectus carefully before investing.

Consumer Electronics
Camcorders, Compact
Disc Players, Color TVs,
VCRs, Stereo Systems
and Components
Home Appliances

Computers:
Notebook PCs
Super Micro Computers,
Workstations
Artificial Intelligence

Semiconductors
1M to 16M DRAMs, S RAMs,
Mask ROMs, EEPROMs,
Micro Products, ASIC Products

Information Systems:
Telecommunication
Equipment,
Office Automation
Equipment, Computer
Peripherals
Communications Satellites

What a powerful world.

At Samsung Electronics creating a better world is a tradition. A world where people have the power and the freedom to develop their own creativity. Today, Samsung Electronics continues this tradition by investing over US\$ 700 million annually in research and development. All four Samsung Electronics divisions are dedicated to inventing and improving

technologies that make our lives easier and healthier. Step up to the world of Samsung Electronics and enjoy the power.



Technology that works for life.

Joong-Ang Daily News Bldg., 7, Soonwha-Dong, Chung-Ku, Seoul, Korea
Tel: 2-751-6114, Fax: 2-751-6064, Tlx: SAMSAN K27364, K23471

nds to use liberal accounting principles—and that some major institutional investors are concerned. But our statement that OPI's accounting practices were "even more adventurous" than those of Chambers Development Corp., which is facing an investigation by the Securities & Exchange Commission, was unwarranted.

ARTHUR ANDERSEN DIDN'T COLLEGE BOUND

Our article "College bound: An 'F' for conduct?" (Top of The News, May 11) made no reference to the company's longtime independent accountant from Arthur Andersen replaced last March, prior to our resignation in April. This omission confuses the reader about which accountant actually audited College Bound Inc.

To clarify the record, Arthur Andersen became the company's independent accountant on Mar. 6 and resigned on Mar. 23. During that six-week period, our firm did not review any internal financial or accounting records of the company, nor did we examine or report on the company's statements for any period. Subsequently, we have been engaged to represent the court-appointed receiver for the company.

William D. Pruitt
Managing Partner
Arthur Andersen & Co.
Chicago

Editor's note: College Bound's recent audits were conducted by Gordon K. Goldman, certified public accountant, Wallis Hills, N.Y.

BLACK SOUTH AFRICANS WANT BUSINESS' HELP

Our readers may be interested in the results of research that Investor Responsibility Research Center Inc. (IRRC) undertook last year in which we interviewed more than 100 South African business executives, community activists, and development experts ("Doing the right thing in South Africa?," Social Issues, Apr. 27). The consensus was, as one black executive told us: "Even with democracy in sight, companies should still be expected to adhere to a social responsibility program."

More specifically, these South Africans said that corporations should concentrate on their responsibility to training and affirmative action inside the workplace. Black South Africans would like to see multinational companies that enter South Africa actively look for black directors, partners, and distributors. Outside the workplace, many inter-

"We work night and day so customers rest easy. We expect no less from our insurance company."

—LANDMARK HOTEL CORPORATION, POLICYHOLDER

We get paid for results.®



PROPERTY & CASUALTY INSURANCE • CIGNA COMPANIES • DEPT. R3, PHILA., PA 19192

When
you give blood
you give
another
birthday,
another laugh,
another hug,
another
chance.



American Red Cross

Please give blood.



Money Making Discovery For Sales Executives!

Imagine finding a hidden universe with thousands of emerging private firms where last year one in seven expanded employment by over 25%, and the 5,000 fastest growing grew by an average of 23% ... creating 502,000 new jobs and the need for almost every kind of business product or service - everything from office equipment to disability insurance to real estate.

A little known sales tool that tracks these companies is making money for sales executives who use it. Called the CORPTECH DIRECTORY, it's the only resource available that uncovers America's emerging sector of technology manufacturers. Think of it! While most of the economy is hurting, *these companies are growing*. CorpTech gives you their names, geographic location, growth rates for each company, plus names, titles, and responsibilities of their 111,000 key executives.

"Great investment ... made money by quickly and easily identifying customers for specific products," Mike Mueller, Manager, Mitsubishi.

Free fact kit shows 20 money-making ways this sales tool can revitalize *your* selling efforts. Call 1-800-333-8036 or mail name and address to CorpTech, Dept BSW, 12 Alfred Street, Woburn, MA 01801.

BUDGET AND AMERICAN EXPRESS COMBINE FORCES TO CUT TRAVEL COSTS.

Everybody has to cut travel costs these days. Some companies just help you do it better than others.

Every time you use the American Express® Card at Budget, you can choose from three exclusive offers like a low rate on a luxurious Lincoln. Or 10% off your next rental. Or a double upgrade. Make your next trip smarter than ever by joining forces with Budget and American Express.

To receive these offers, here are a few details you will want to know. These offers are good between 4/1/92 and 6/30/92 at participating Budget locations, when you charge your rental with the American Express Card. You will need to mention offer at time of reservation and at time of

THREE SMART CHOICES.

\$39⁹⁹
Per Day.

Lincoln.

Unlimited Mileage.

Optional LDW \$12.99
or less where available.

10% OFF

On compact through
full-size cars.
2 or more rental days.

**DOUBLE
UPGRADE.**

When you reserve an
intermediate-size car,
receive a double upgrade
to a full-size.

rental. Three-day advance reservations are required. Double upgrade subject to availability of larger car at time of rental. Refueling service, taxes and optional items are extra. Offers not available with any other discount or promotion. 10% off not available with CorpRate® or government rates. Blackout periods, surcharges for extra drivers and drivers under 25, and other normal rental requirements will apply. Car must be returned to renting location. Lincoln rate may be higher in New York and other major metropolitan areas. Only one offer per rental. For information and reservations, contact your travel consultant or call Budget at 800-527-0700 and ask for the American Express promotional offers.



THE SMART MONEY IS ON BUDGET.™

Not valid for use at Budget locations where American Express is not accepted.

ewees believe that initiatives in education—given that the majority of adults Africans have not completed a fifth-grade education—should take priority in corporate responsibility programs.

Meg Voorhes, Director
South African Review Service
Investor Responsibility Research
Center Inc.
Washington

HERE'S SOMETHING TO THIS INDUSTRIAL POLICY' IDEA

Speaking as an industrialist with 35 years of experience in manufacturing at Merck & Co., I would like to state your article "Industrial policy" (Cover Story, Apr. 6), not so much for its title but for its content. The term "industrial policy" does connote a government policy of picking winners and losers. I oppose that. But I believe that most industrialists would identify with your article—and the telling results of your survey—that the federal government has an important and proper role in bolstering the competitiveness of America's industrial and technology base.

David A. Conkin, Chairman
National Coalition for Advanced
Manufacturing
Washington

GETTING MUSCLE IN CAP CITIES/ABC?

Regarding your story "Why the losing network is still a winner" (Media, Apr. 20): The fact is that Capital Cities/ABC Inc. has been blithely stepping over \$5 bills to pick up easy pennies, and during the last couple of years it has played financial havoc with affiliates. As far as Stephen A. Weiswasser goes.... I have no idea what qualifications he offers ABC News, since lawyers are trained in lawyering. Time will demonstrate that Weiswasser's role is to continue in the Cap Cities style of tight control. Parenthetically, that is a terrific concept, except when you start getting muscle. But then again, how will Weiswasser know that difference in news broadcasting? He won't find many answers in the *Law Review*.

Alan Henry, President & CEO
AnchorMedia Group
St. Petersburg, Fla.

Editor's note: AnchorMedia owns three ABC affiliates.

Letters to the Editor should be sent to Readers Support, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4464, telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

Benefits advisors rate us the number one provider of group accident insurance.

We get paid for results.®



SPECIAL BENEFITS • CIGNA COMPANIES • DEPT. R3, PHILA., PA 19192

CANS BOTTLES PAPER PLASTIC

You just separated your trash.

**Recycling
is easy, isn't it?**
In fact,
it's one of
the easiest ways
you personally
can make the world
a better place.

If you'd
like to know more,
send a
postcard to
the Environmental
Defense Fund-Recycling,
257 Park Ave. South,
NY, NY, 10010.

You will find
taking the first
step toward
recycling
can be as easy
in practice
as it is
here on paper.

R E C Y C L E

It's the everyday way to save the world.

VENDETTA: AMERICAN EXPRESS AND THE SMEARING OF EDMOND SAFRA

By Bryan Burrough

Harper Collins • 494pp • \$25

WHAT DID ROBINSON KNOW, AND WHEN DID HE KNOW IT?

For American Express Co., image is everything. In just the past decade, it has spent billions bolstering its aura of prestige, affluence, and exclusivity. For a time, no one embodied the mystique better than CEO James D. Robinson III, who took the helm in 1977. Robinson's patrician good looks and jet-set style fit perfectly with AmEx's glamorous ads. Yet a series of corporate missteps gradually sullied his and his company's self-created myth.

One of AmEx's biggest blunders was revealed in 1988, when Robinson delivered an apology to Edmond Safra, a Lebanese banker, and AmEx gave \$8 million to Safra's favorite charities. "Certain persons acting on behalf of American Express," Robinson admitted, had attempted to "use the media to malign" Safra.

Bryan Burrough, a reporter at *The Wall Street Journal* and co-author of the best-seller *Barbarians at the Gate*, has exhumed this incident in *Vendetta: American Express and the Smearing of Edmond Safra*. In telling the tale, Burrough aims to prove three things: that Robinson knew of the smear campaign, that it was motivated in part by his alleged anti-Semitism, and that Safra is innocent of any crime.

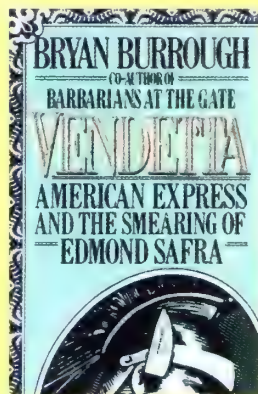
On the first point, Burrough convinces us only that Robinson probably knew. The relationship between AmEx and Safra had soured in 1984, after Safra left Trade Development Bank, which he had sold to AmEx the year before, and began laying the groundwork for a competing operation. In 1986, in an effort to stop Safra from getting a Swiss banking license, Robinson initiated an investigation into whether Safra was involved in the Iran-*contra* scandal. He was posted regularly on its progress. Burrough says the probe escalated into character assassination for reasons ranging from AmEx's desire to keep Safra from hiring its employees to the overzealousness of AmEx flacks who figured—correctly—that they could manipulate the press. As

for Robinson, either he "knew and approved of what his aides were doing, or he knew he didn't want to know," concludes Burrough. "It's hard to say which is worse."

On the question of whether Robinson is anti-Semitic, Burrough is not particularly persuasive. He is more convincing, however, in absolving Safra of alleged crimes from murder-for-hire to money laundering. "As far as I've been able to determine," he writes, "none of these charges have ever been substantiated."

What the author proves most success-

Burrough documents the dirty tricks used to smear Safra, but on other points he is less convincing



fully is that he can deliver another good read, a fly-on-the-wall account of the twists and turns in this bitter feud. He styles *Vendetta* as a whodunit told from the viewpoint of Safra's battalion of lawyers, detectives, and employees as they try to prove that American Express is masterminding the negative stories. The climactic moment comes when Safra's investigators photograph Tony Greco, whom Burrough describes as a "consort of Mafiosi, assassins, and thieves," meeting with an American Express employee. Since Safra's men already know that Greco has been spreading dirt about Safra, this is the "smoking gun" they need to lay the smear campaign at AmEx's door.

Vendetta doesn't have *Barbarians'* relentless snap-crackle-pop. Burrough's technique for sustaining suspense is strained: Time and again, Safra is outraged by a negative article, and time and

again his lieutenants scramble to trace to AmEx. Burrough's account of some important issues, such as whether Safra was really involved in Iran-*contra*, is irritatingly confusing. And any way you slice it, the subject is less compelling than a Wall Street brawl over a \$25 billion company. Still, you won't find more sordid tale of corporate dirty tricks. Through the piling up of detail, what comes across most strongly is how repugnant a wrong was done to Safra.

Burrough struts some of his best stuff in his book's rich tangents. About AmEx's 140-year history and the origins of Safra's Sephardic Judaism, he tells too much. But his portrayal of complex characters, such as Susan Cantor, an AmEx employee who misrepresents herself as a reporter—and whom Burrough depicts as a loose cannon—is absorbing. And the book's milieu—the international intelligence underworld, peopled with 300-pound Peruvian tipsters, Spanish

counterfeiters, and bureaucratic FBI agents—has a seamy fascination.

Press manipulation is also a compelling theme as Burrough documents the frightening domino effect of AmEx's global disinformation campaign. At one point, Greco, acting as an FBI informant, delivers a "dubious tip," which another federal official passes along in a quiet letter to the U.S. Embassy in Bern. Greco then gets ahold of the incriminating letter and gives it to an impressionable reporter, who prints it. *Vendetta* is an emphatic

reminder to journalists and readers to consider the story behind the story.

Which makes it mandatory to consider that *Vendetta* is itself part of a counter-vendetta against AmEx. It couldn't have been written without the willingness of Safra's camp to bare their souls—and file cabinets—knowing they were spearing AmEx's Achilles' heel: its image. The reader is in the middle of a feud that Safra won't let die, Burrough implies, because he is convinced that AmEx and Robinson are still driven by virulent anti-Jewish feelings. AmEx, for its part, did not cooperate and denies the book's accusations. "I was not aware of it, did not authorize, and did not condone any effort to spread false information about Edmond Safra or his banks," Robinson recently told shareholders.

Burrough comes closest to grappling with his role in Safra's counterassault in his final paragraph. The vendetta, I

ays, has swung full circle: "Now it is
afra who looks for ways to humiliate
nd topple Robinson."

BY LEAH NATHANS SPIRO

vestment Banking Editor Spiro writes of
n about American Express.

BOOK BRIEFS

THE NIPPON CHALLENGE:

JAPAN'S PURSUIT OF THE AMERICA'S CUP

by Patrick Smith

Published by • 331pp • \$24

JAPAN IN A YACHTSHELL

What does making cars and VCRs have to do with competing in the America's Cup? In Japan, plenty, as Patrick Smith shows in *The Nippon Challenge*, an engaging if excessively detailed account of Japan's long-shot bid to win the elite sailboat race. Smith makes the story of Japan's first cup entry a metaphor for the country's entire postwar economic strategy: borrow someone else's ideas and work relentlessly to improve upon them.

The tale starts in 1987, when a group of Japanese executives and sailing enthusiasts flew one of America's most seasoned cup sailors to Tokyo for consultations. Given Japan's lack of sailboat-racing tradition, the organizers had a lot to learn. How much would it cost to launch a credible team? What sort of training would be needed? The Japanese then purchased from New Zealand two yachts from the 1987 race and used sophisticated computers to redesign the hulls and keels. They also hired a skipper and other top crewmen from New Zealand.

The syndicate's fund-raising effort is another textbook case of how business gets done in Japan. For the U.S. syndicate, billionaire Bill Koch forked over \$5 million. In Japan, 30 corporations pitched in just \$1 million each and donated an additional \$15 million in research and computer time. (The syndicate's pitch to Japanese executives, Smith says, emphasized showing that Japanese could spend lavishly on something frivolous, to humanize their image abroad.)

When the races' organizing committee unexpectedly scrapped 12-meter yachts in favor of a new class of boats, Japan's designers could no longer just make existing boats better. That proved daunting. In computer simulations, their new yacht sailed flawlessly, but the real thing handled poorly and often broke down. So engineers designed one that performed dramatically better—so much so that the Nippon Challenge won 18 of 21 races before being knocked out of the semifinals. Its sailors are improving, too. Next time, look for a Japanese skipper.

BY ERIC SCHINE

95 of the top 100 U.S. multinational companies choose CIGNA for their insurance coverages.

We get paid for results.®



CIGNA COMPANIES • PHILADELPHIA, PA 19192

Take care of business.

Attach
your present
Business Week
mailing label
here

- ☐ I'm moving, please change my address as indicated below
- ☐ Please extend my Business Week subscription for one year at **\$44.95** (In Canada, C\$ 66.00*).
- ☐ I'd like to become a subscriber for one year (51 issues) at **\$44.95**.

Name _____ (please print)

Address _____

City _____

State _____

Zip _____

☐ Check enclosed

☐ Bill me later

To take care of any other business, call toll-free

*Price Includes GST

1-800-635-1200

BusinessWeek

SUBSCRIBER SERVICE

Mail entire ad to
Business Week
P.O. Box 421
Hightstown, NJ 08520

DID YOU HEAR THE ONE ABOUT THE BALANCED BUDGET?

BY ALAN S. BLINDER



The latest yuk from Congress is called the balanced-budget amendment. It could wind up making slumps deeper and recoveries more difficult—and that's no joke

It would be comical if it weren't so serious. Yes, fans, the folks who brought you a \$269 billion deficit in fiscal year 1991 and are pushing \$400 billion in 1992 now are poised to pass a constitutional amendment mandating a balanced federal budget. Unless this legalistic lunacy is stopped, it may pass both houses of Congress in a month or two and be sent to the state legislatures for ratification. Since many states are eager to ratify, this abomination could become law in record time.

But why call it an abomination? Isn't the deficit too high? And hasn't the U.S. political mechanism shown itself incapable of dealing with it? The answers are yes and yes, but the constitutional cure is worse than the budgetary cold.

Let me start with the problem that is at once the most obvious and the most serious. As everyone should know by now, recessions swell budget deficits by reducing tax receipts and raising expenditures on items such as unemployment insurance. Under a balanced-budget amendment, Congress would be required to raise taxes, cut discretionary expenditures, or do both whenever the economy weakened—thereby aggravating slumps and making recoveries harder to sustain.

The House version at least limits outlays to estimated receipts rather than actual receipts, so a recession that takes us by surprise would not require a contractionary fiscal response. But the Senate version is based on actual receipts and has no such virtue.

DRACONIAN MEASURES. The recent recession provides a sobering example of how things might work out in practice. In January, 1991, the Administration projected a \$318 billion deficit for the fiscal year ended Sept. 30, 1991. Had the balanced-budget amendment been in effect, Congress would have had to pass spending cuts and tax hikes totaling much more than \$318 billion, because such draconian fiscal measures would surely have deepened the recession and depressed tax receipts further. What was a relatively mild, though long-lasting, contraction might have developed into a whopper. Why inflict this on ourselves?

Supporters note that the balanced-budget requirement could be overridden by a three-fifths vote of both chambers of Congress, with the House version also providing for a waiver in case of declared war. So the amendment could be waived when compliance would be most harmful. That's comforting. But why write into the Constitution something that we routinely expect to suspend?

The problems do not end there. Budget balance is a shibboleth, supported by no sensible economic principle—especially not when gross

domestic product, private debt, and business debt keep growing year after year. And the myopic focus on the federal deficit, to the exclusion of state and local deficits, is curious when the federal government sends the state about \$150 billion in aid each year.

Even if we somehow decided that a deficit of zero is the right target, the current federal accounting system is hardly the best way to keep score. To cite just two examples, it draws no distinction between current operating expenses and capital expenditures—which are routinely separated in state and local budgets. And it fails to recognize that inflation, by reducing the real value of the outstanding national debt, automatically yields tacit revenue to the government. Shall we enshrine neolithic accounting practices in the Constitution? Or shall we amend the Constitution each time accounting practices change?

SPENDING LIMIT. Other objections are procedural and constitutional. Under a balanced-budget amendment, Congress might mandate action by others rather than spend money itself. More items would surely be moved off-budget. The price, in both cases, would be less oversight and political accountability.

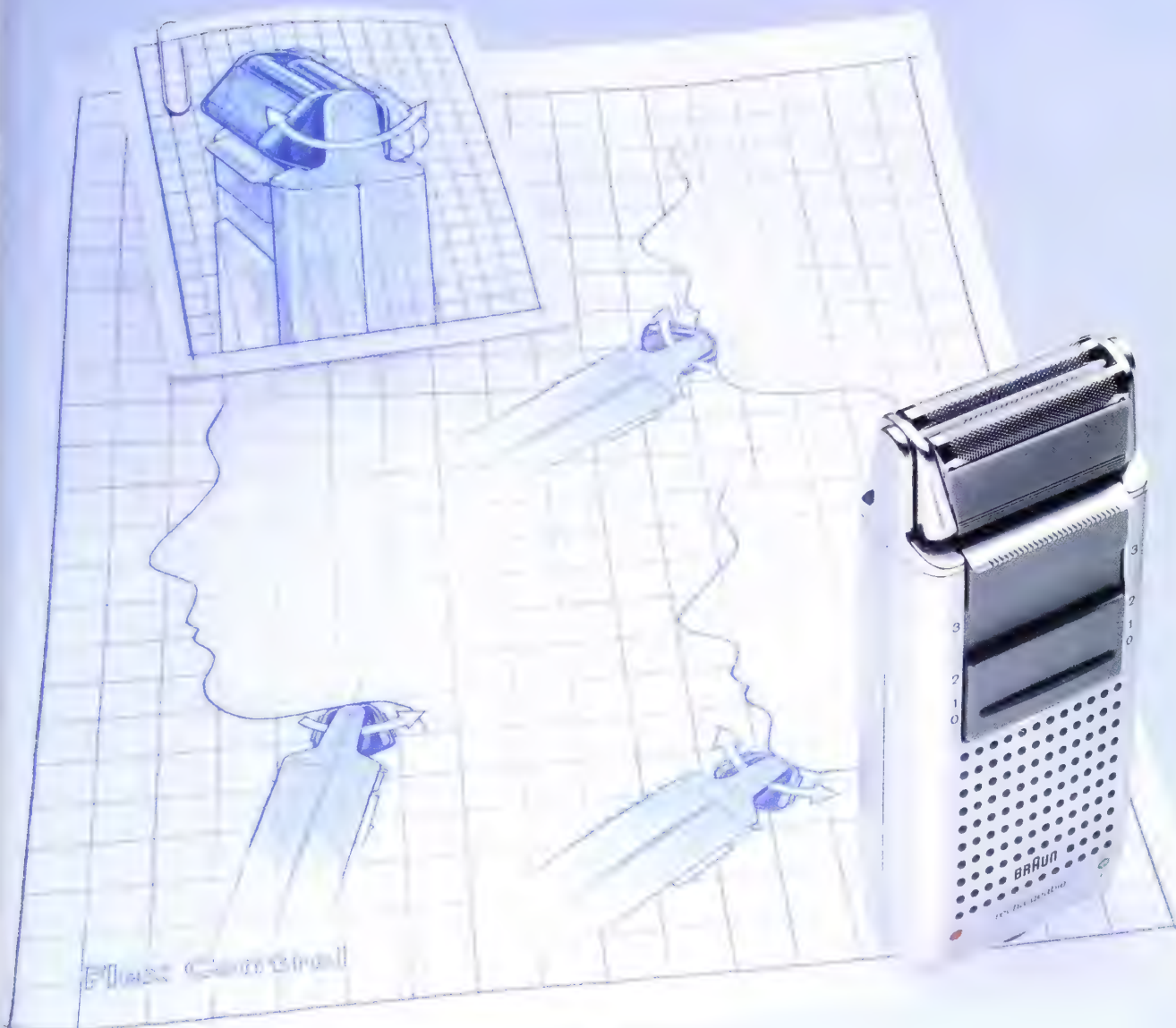
Then, we must remember that America is the most litigious society on earth. Just imagine the lawsuits that would be filed alleging that Congress had violated the amendment in letter or spirit. The prospect of economic policy being made by judges, rather than by Congress, may appeal to some. But it is certainly not the way that powers are assigned by the Constitution.

Supporters claim that most states live with balanced-budget requirements now. Leaving aside the humorous notion that the states are models of fiscal rectitude, this assertion is quite wrong. State governments balance their operating budgets but finance capital expenditures by issuing debt.

The closest thing to a valid argument in favor of the amendment is that forcing Congress to finance all expenditures by taxation would limit spending—an outcome with evident appeal on the political right. But is it true? The fact that state and local spending has grown faster than federal spending for decades should give pause. And there is surely a more straightforward approach with fewer undesirable side effects: Pass a law limiting the growth of spending.

They say you can't beat something with nothing. So, I conclude with my own substitute amendment, combining the two worst constitutional ideas of the 1980s: Let's amend the Constitution to require children to pray for balanced budget in the schools.

ALAN S. BLINDER IS THE GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON AND THE AUTHOR OF *GROWING TOGETHER*



The new Braun Flex Control.

Its pivoting head is designed to conform to your face...like no other shaver before it.

Your face has many different angles and curves. So Braun has introduced Flex Control—the first electric shaver with a pivoting head.

It automatically adjusts

itself to each curve on your face, always maintaining the optimal shaving angle. To deliver Braun's closest shave ever.

And with the twin foil coated in platinum, the

shaver glides smoothly and effortlessly across your face.

Simply because when it came to making a better shaver—we first studied your face.

And then we designed

the Braun Flex Control accordingly.

BRAUN

Designed to perform better.

Available at Foley's, May Company, Famous-Barr, Robinson's, May D&F, and Meyer & Frank.

The FAA Is Already Looking Forward To The Day These Kids Are Grown.

Every year, more people travel by air. And every year, our air traffic system gets pushed a little harder. As this trend continues, we need to ensure that our future air traffic system will be able to accommodate tomorrow's travellers.

The Federal Aviation Administration has developed a visionary plan to meet that challenge—a plan for “Moving America into the 21st Century.”

It's a vast, far-reaching program that not only modernizes the air traffic system today, it also looks ahead to the needs of future system users. Our air traffic system must be more internationally compatible, exploit new and emerging technologies, and must improve the present system—while in use.

And that's just what the FAA's program does. Its primary focus, for example, is to integrate weather, navigation, landing, communications and surveillance systems, using global computer and satellite technology.

The FAA has a flight plan for the future already in place. We're proud that Martin Marietta can be part of the team that will help make it fly.

MARTIN MARIETTA

6801 ROCKLEDGE DRIVE, BETHESDA, MARYLAND 20817





Economic Trends

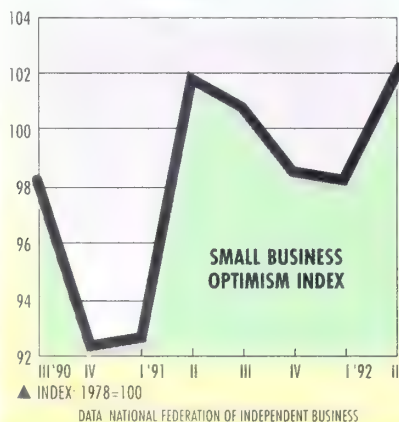
BY GENE KORETZ

'GOOD SIGNS EVERYWHERE FOR SMALL BUSINESS'

The upbeat mood seen recently among manufacturers has spread to the small-business sector. The National Federation of Independent Business (NFIB) reports that its quarterly index of small-business optimism jumped four points in April, hitting a three-year peak. NFIB President Jack Faris sees "good signs everywhere for small business."

The latest gain reverses three quarters of decline. It was just a few months ago—in January, on the heels of a dismal Christmas—that respondents said they had had the worst sales decline in the 18-year history of the survey. By contrast, April results show that sales rose last quarter for the first time since the first quarter of 1990. At the same time, earnings rebounded and turned in

SMALL BUSINESS TURNS BULLISH AGAIN



their best reading in a year and a half.

On the other hand, small-business hiring last quarter was decidedly restrained, with respondents reporting a net loss of workers. "Only the starting of new firms, which is not reflected in our survey, is adding something to employment rolls," says NFIB economist William C. Dunkelberg, who notes that even in the 1980-82 recession, new starts created 1.5 million jobs.

Similarly, inventory liquidation proceeded apace in the first quarter, as 21% of respondents reduced stocks, compared with 14% who increased them. And capital spending remained mired at its lowest level since 1983.

Fortunately, all of this may be about to change. Looking ahead, 16% of companies surveyed said that now was a good

time to expand—the highest percentage in two years. Some 48% expect better business conditions vs. only 7% who anticipate a worse climate. And 57% expect a pickup in real sales volume, while only 13% predict a decline.

What's more, the little guys are planning to raise spending. Capital-investment plans are up slightly, and some 18% of small businesses now plan to build inventories, compared with 11% planning reductions. At the same time, 20% intend to boost employment over the next six months, more than three times the number anticipating layoffs. "The upswing in spending and hiring plans," says Dunkelberg, "suggests that the survey reflects more than just hope that the economy will pick up steam."

THE GREENBACK BUYS A LOT LESS IN DEVELOPING COUNTRIES

Economist William Sterling of Merrill Lynch & Co. calls it "the quiet crash of the dollar." He notes that, while the U.S. dollar has either strengthened or stayed steady against a number of minor currencies since 1987, its purchasing power in those currencies has fallen sharply—by 12% against Singapore's dollar, for example, 17% against Hong Kong's dollar, 21% against the Korean won, and 35% against the Mexican peso.

Inflation in many developing countries, explains Sterling, has far outpaced U.S. inflation. And although this would ordinarily cause their currencies to decline against the dollar to compensate for their lower real value, this hasn't happened. As anyone visiting Hong Kong or Mexico these days knows, greenbacks buy a lot less than they did four or five years ago.

What's behind this development? Falling interest rates in the U.S. have prompted a search for higher returns overseas, notes Sterling, just as a wave of privatization and market-based reforms has created the promise of permanently higher returns in developing countries. And their resulting inflow of capital has kept local money strong against the dollar, despite inflation.

For the U.S., the payoff from this dollar weakness has been a huge surge in exports to the developing world. Indeed, developing nations now take 38% of all U.S. exports, and they accounted for nearly 80% of U.S. export growth last year. What's more, with foreign exchange reserves soaring in many emerging nations, those countries appear to have the wherewithal to keep buying American for a long time to come.

FACTORY ORDER BOOKS AREN'T SO FAT ANYMORE—BUT SO WHAT?

Although durable-goods orders rose nicely in the first quarter, unfilled orders—a leading economic indicator—have been falling, as shipments have outpaced orders. And as some skeptics see it, as long as the backlog of orders is shrinking, manufacturers will be slow to expand output and jobs.

Not to worry, advises economist Maury N. Harris of PaineWebber Inc. He points out that in the postwar period, the statistical correlation between orders and durable-goods output (and jobs) has been significantly higher than the correlation between backlogs and employment and production. In other words, rising orders are more likely than rising backlogs to be accompanied by job and output gains. Harris also believes that the growing use of just-in-time ordering is continuing to put downward pressure on unfilled order levels.

Economist Joseph G. Carson of Dealer Witter Reynolds Inc. adds another explanation: At the beginning of an upturn, he notes, incoming orders are skewed toward short-cycle products such as electric motors and household appliances. Outgoing shipments, meanwhile, are still largely composed of higher-priced long-cycle products. The result: a drop in order backlogs that isn't truly reflective of the economy's momentum.

"That's one reason," he says, "why order backlogs didn't turn up until the last recovery was five months old."

THE WEATHER WARMS, TREES GROW LEAVES, AND BOND YIELDS DROP

After rising in the first four months of 1992, long-term bond yields are set to decline through the rest of the year, predicts economist Lacy H. Hunt of HongKong Bank Group. His reason: persistent monetary weakness, a sharp slowdown in housing construction after the first-quarter surge in starts, drops in inflation-adjusted retail sales in March and April, and a continuing decline in real commercial bank lending.

Economist Edward Yardeni of Citicorp Inc. also points to a startlingly consistent seasonal pattern. "In every year since 1987," he notes, "long-bond yields rose in the first few months of the year but then weakened considerably toward the end of the year."

"I haven't taken a LaserJet in for repairs once in seven years."



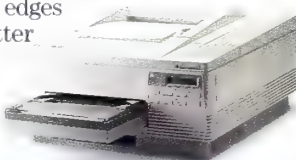
—Clyde Alpert, ARL Services Inc., Chicago, IL

"I repair other printers once, twice, maybe three times a year," says Clyde Alpert. "But I never have to take the LaserJets in. We've pumped thousands and thousands of copies through them, and they've never failed us."

In addition to great reliability, HP also offers exceptional customer support. For example, the LaserJet Customer Assist Line is staffed with experts to advise you after the sale. They'll help you take full advantage of all the HP LaserJet printers' unique features and

answer your hardware and software questions.

With five award-winning models, ranging in price from \$1,249 to \$5,495,* HP offers an unbeatable selection. You can also choose genuine PCL5 printer language, with scalable typefaces. As well as HP's exclusive Resolution Enhancement technology, which creates sharper edges and better overall print quality.



To hear more about what other customers have to say about HP LaserJet printers, remember to call 1-800-752-0900, Ext. 2986 for a free video. Then forget about repairs.

HP LaserJet Printers.



**HEWLETT
PACKARD**

*Suggested U.S. list prices.
© 1992 Hewlett-Packard Company PE12252

We weren't always old and conservative. We used to be young and conservative.

Trendsetters, we're not. But the investment policy we've had for the past 147 years has apparently become all the rage of late. Being on the safe side is in. Buttoned down is cool.

How could our founders, seated around a table in 1845, have predicted the financial climate of the early 1990s?

The answer is simple. They knew that the future would hold bad times as well as good.

And that a life insurance company, by its very nature, had a responsibility to its customers to weather the storms.

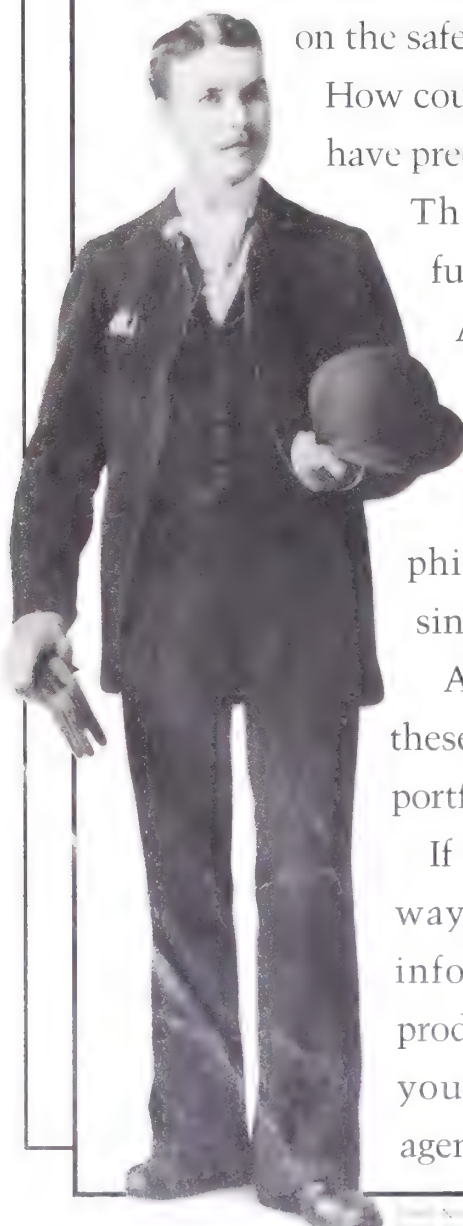
So they laid down a conservative investment philosophy, one that we have adhered to ever since, through thick as well as thin.

As a result, we're happy to report that even in these topsy-turvy times, 95% of the bonds in our portfolio are investment grade.*

If this is the price we pay for being set in our ways, we don't mind one little bit. For more information on any of our products and services, call your New York Life agent or 1-800-695-4331.



The Company You Keep.®

New York Life Insurance Company and New York Life Insurance and Annuity Corporation, 160 Madison Avenue, New York, NY 10017. *Assets reported. *As of December 31, 1991, the New York Life Insurance Company, NYLIC, an Equal Opportunity Company, New York Life Insurance and Annuity Corporation (NYLIAC), managed by New York Life Insurance Company, NYLIC has \$40.7 billion in assets and \$2.620 billion in surplus. NYLIAC has \$11.613 billion in assets and \$0.591 billion in surplus.

READY FOR TAKEOFF, BUT STILL BOUNCING DOWN THE RUNWAY

The recovery keeps gyrating like a dancing mummer: two steps forward, one step back, with some erratic twirls in between. The economy is likely to continue this bob-and-weave pattern, but the forward push should be enough to keep the recovery on track. In the latest set of conflicting data, the economy's forward thrust came from gains in industrial output and business inventories. But housing produced a surprising-strong drag in April. The foreign trade sector—a star contributor to the economy in 1991—is unlikely to offer much help this year, as a pickup in imports offsets growth in exports. As a result, trade will neither add to nor subtract much from future economic growth.

The mixed data are why some analysts think the Federal Reserve Board considered easing one more time when it met on May 19 to set monetary policy for the next seven weeks. But even with another cut in interest rates, it will take some time before the economy hits a smooth upward stride. More importantly, perhaps, job growth will have to pick up before consumers feel secure enough to boost their spending.

Certainly, the 17% plunge in housing starts in April, to an annual rate of 1.12 million, was a signal that the economy may need some more help (chart). The drop showed up in all types of housing and across all regions. In particular, starts of multi-unit projects fell 42.8%—the largest monthly decline in 29 years of record-keeping. The drop in apartments, though, was less jarring than first seemed. Multi-unit starts had soared 73.4% in March, so the April reading simply returned apartment building back to a lower, more sustainable pace. Apartments are in oversupply in many regions, so the construction of new projects will be modest this year.

HOUSING: JUST TAKING A BREATH? April's decline in single-family homes is much more worrisome to the outlook. The 10.6% drop was the second in a row in a sector that has been a vital energy source in this recovery. The question now is whether the housing upturn took a breather or hit a brick wall in April. Homebuilders, at least, remain upbeat. Members of the National Association of Home Builders report that sales and buyer traffic in May fell only a bit from their very high April levels. And 38% of builders expect single-family home sales to be good for the next six months,

while only 12% expect sales to be poor. Even sales of townhouses and condominiums are expected to improve slightly into the fall, says the NAHB.

The swing in interest rates is another reason to believe that April was only a pause. The falloff in single-family starts was probably caused by rising mortgage rates. The average rate on a 30-year fixed mortgage stood above 9% in early April. That's high enough to push some consumers out of the housing market.

Now, however, according to HSH Associates, mortgage rates are back to 8.68%. That's the lowest rate since late January. Lower borrowing costs mean that demand for homes should revive. Indeed, during the week of May 8, applications for mortgages for home purchase rose for the first time in two months.

FACTORY OUTPUT GAINED GROUND

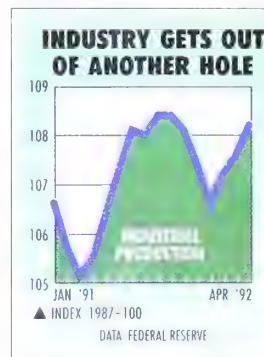
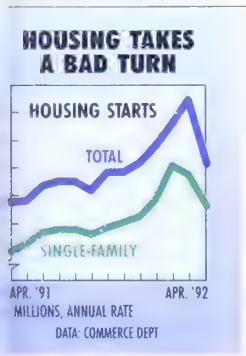
Even as homebuilders were catching their breath in April, the industrial sector was forging ahead. Output at the nation's factories, mines, and utilities rose by 0.5% for the month. That was the third consecutive gain in activity, helping industry to recoup almost all of the losses of the fall (chart). In coming months, the industrial rebound should be helped by the need to rebuild business inventories, and by modest growth in exports.

Factory output was up 0.5% in April, after a 0.4% rise in March. Auto makers helped to lift total production in April. New cars were assembled at a 5.9 million annual rate, up from 5.2 million in March. But other factories are also buzzing. Makers of furniture, paper, and business equipment—especially computers—all increased output by more than 1% in April.

Producers of construction supplies saw their fourth consecutive rise in output with a 0.6% advance in April. Makers of glass, wood products, and plumbing equipment are benefiting from the housing recovery.

Starting off the second quarter, industrial production stands a strong 4% above its first-quarter average, at an annual rate. And if the latest survey from Dun & Bradstreet Corp. is an indication, industrial output should be able to make further gains in coming months.

According to a D&B survey of 1,000 companies, manufacturers saw improvement in business conditions in April, with good news in production, unfilled orders, and exports. The D&B reading of expectations for the coming

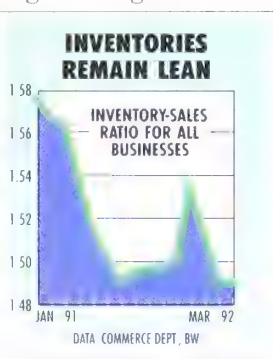


Business Outlook

three months remained unchanged in April, after four consecutive monthly increases. In particular, the high readings of expectations about new and unfilled orders bode well for future increases in output.

FACTORIES AREN'T GOING FULL TILT

The gains in output haven't overburdened factories yet. Capacity utilization for all industry rose to 78.7% in April, from 78.4% in March. And factories used 77.7% of capacity in April, up from March's 77.5%. Operating rates have inched up by nearly one percentage point since hitting a nine-year low in January. This rise means that industry is on the mend, but capacity is not nearly tight enough to send warning signals about inflation.



Factories should get a little boost this summer if businesses feel the need to build up inventories in response to better sales. In March, stockpiles held by manufacturers, wholesalers, and retailers grew by 0.4%, after no change in February. But business sales were up by a slightly faster 0.5% in March, following a 1.5% jump in February. As a result, the ratio of

business inventories to sales fell slightly to 1.49—the lowest reading in 1½ years (chart).

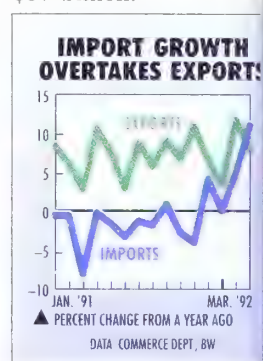
Retail inventories expanded by a large 0.8% in March, but some of that buildup may have been intentional, in anticipation of Easter shopping in April. Indeed, retail sales jumped by 1% for that month, suggesting some decline in store inventories.

Moreover, the government's annual revisions to retail sales, to be released during the week of May 26, should show consumers shopped more than it first appeared. The Commerce Dept. says that the level of retail sales over the past year will likely be revised higher, so retail-

ers may feel more confident about stocking more goods. American products are not the only items packed into retail warehouses, however. Increased domestic demand is also drawing in goods from abroad. That means that import growth will accelerate at the same time that U.S. export gains are likely to be very subdued because of slumping economies abroad. So, foreign trade—which kept the economy from falling more than it did in 1991—won't be much help to the recovery this year.

Rising imports caused a wider trade deficit in March. The trade gap increased to \$5.8 billion, from \$3.3 billion in February. Imports were up by 4.5%, to \$42.8 billion in March. But exports fell 1.8%, to \$37 billion.

Recovery in the U.S. is once again opening the import spigot. Imports are running 11.1% higher than their pace of a year ago. That's faster than the 8.2% rise in exports over the past 12 months (chart). Import growth hasn't surpassed the gain in exports since 1989. But if domestic demand continues to grow—even modestly—this year, import gains will also increase.



Exports, meanwhile, will be hard-pressed to keep up with the faster pace of imports. That's because of recessions in some industrialized countries. True, U.S. companies have been successful in exporting to developing countries in Latin American and the Pacific Rim, but those gains are only modestly offsetting the stagnation in U.S. shipments to Europe and Japan.

Exports won't add as much to the economy as they did in 1991, but other sectors should take up the slack. A pickup in industrial output, a second wind in housing, and the rebuilding of inventories will provide the economy with a few new dance steps—and keep the recovery gliding along for the rest of this year.

THE WEEK AHEAD

CONSUMER CONFIDENCE

Tuesday, May 26, 10 a.m.

The Conference Board's index of consumer confidence probably rose to 66 in May, say economists surveyed by MMS International, a unit of McGraw-Hill Inc. If so, that would be the third strong increase in a row. In April, consumer confidence rose by 8 points, to 64.8. Feelings about current economic conditions and the economy's future six months from now both showed improved optimism in April.

DURABLE GOODS ORDERS

Wednesday, May 27, 8:30 a.m.

New orders taken by durable-goods manufacturers likely increased by a

small 0.5% in April, after rising 2.1% in March. However, the April gain may be a bit stronger, as suggested by the 0.7% advance in durable-goods production in April. Increasing new orders indicate that the slide in the level of unfilled orders may finally have stopped. The backlog has shrunk for seven months in a row, including a 0.7% drop in March.

GROSS DOMESTIC PRODUCT (REVISION)

Friday, May 29, 8:30 a.m.

The Commerce Dept.'s second look at the first-quarter economy is likely to show that real GDP grew at an annual rate of 2.5%, instead of 2% as previously calculated. A smaller liquidation of inventories and some upward revisions to outlays for nonresidential buildings

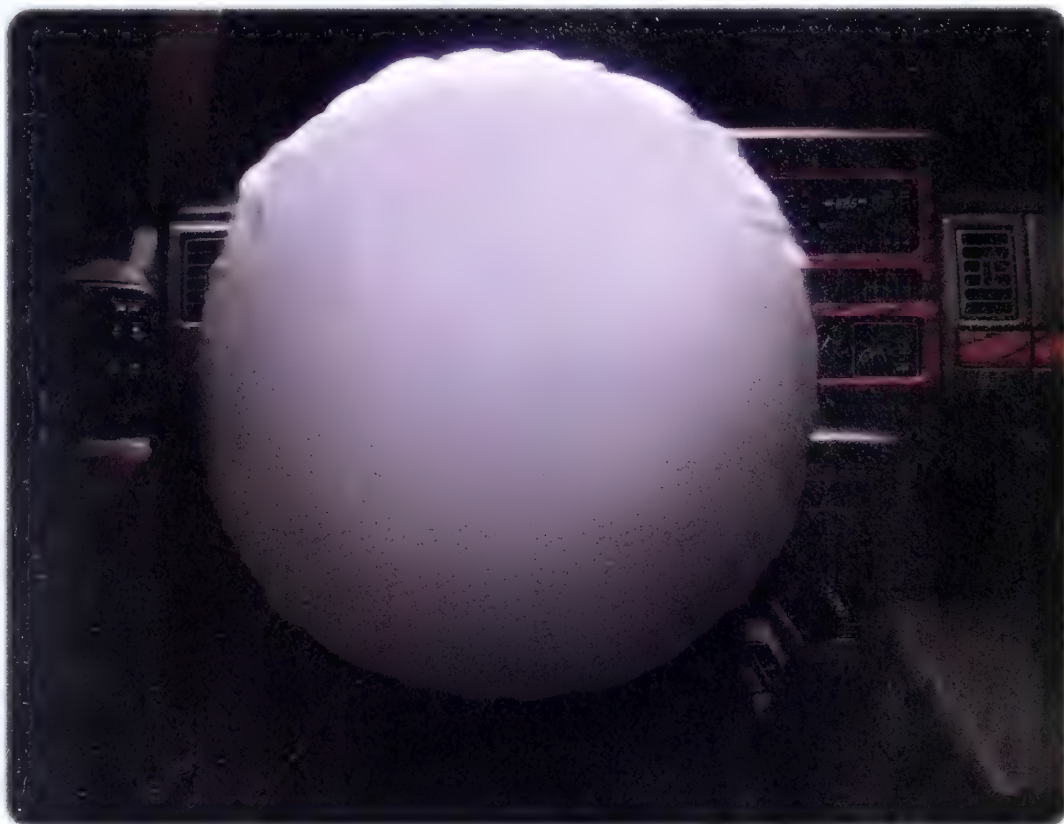
should provide the extra boost to the economy. In the fourth quarter, real GDP grew at an annual rate of just 0.4%. The MMS economists expect that inflation—measured by the GDP price deflator—rose at an annual rate of 3%, little changed from the 3.1% first reported.

CORPORATE PROFITS

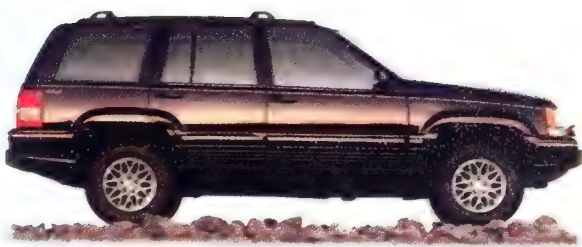
Friday, May 29, 8:30 a.m.

Aftertax corporate profits, reported the same Commerce report as GDP, probably rose by 5%, say the MMS economists. Profits have been sagging for three years, but the recovery is helping to lift earnings now. In the fourth quarter, aftertax profits were virtually flat from the third quarter, but remained 4.7% below their levels of a year ago.

The World's Toughest 4x4 Is The Only One With A Soft Spot.



The New Jeep® Grand Cherokee Limited



There's Only One Jeep®
Advantage: Chrysler



Chrysler's Owner's Choice Protection Plan includes: 7-year/70,000-mile powertrain protection or 3-year/36,000-mile bumper-to-bumper warranty. Your choice. And with no deductible. See limited warranties, restrictions, and details at dealer. Excludes normal maintenance, adjustments, and wear items. For further information about Jeep Grand Cherokee, call 1-800-JEEP-EAGLE. Jeep is a registered trademark of Chrysler Corporation.

Buckle up for safety.

OFFICIAL SPONSOR OF THE 1992 U.S.A.
U.S. OLYMPIC TEAM 36 USC 380



JUNE 1, 1992

CAN O&Y ESCAPE?

MAYBE IT'S NOT TOO BIG TO FAIL

Ever since Olympia & York Developments Ltd. disclosed in March that it would have to restructure upwards of \$12 billion in debt, O&Y Chief Executive and chief strategist Paul Reichmann has clung stubbornly to the notion that his empire was simply too big to fail. And for a while, conventional wisdom was on his side. If the Toronto developer failed, the financial community worried, already slumping worldwide real estate values would sag even further. From Tokyo to London, banks would face such severe losses as to shake the world's financial system.

Yet two months later, that doomsday vision shows no sign of coming true. Besieged by creditors and unable to reach an agreement with its bankers, O&Y did what was considered unthinkable barely weeks ago. The company filed for protection from its creditors in Canadian court on May 14. At the same time, O&Y and four Canadian subsidiar-

ies sought Chapter 11 shelter in the U.S. Reichmann and his brothers, Albert and Ralph, may soon have to seek similar protection for their empire's vast U.S. holdings and the Canary Wharf office development in London.

Aside from some minimal disruptions in the world stock markets, Olympia & York's filings caused more of a stir in daily papers than they did among banks and the rest of the financial community. Within days, markets around the world were bounding higher. There was even talk that O&Y's travails, while harmful to the recovery in real estate prices, would have little immediate impact on the already woefully depressed market (page 28).

PLAYED-OUT CARDS? Now, as creditors and O&Y executives begin talks in Toronto, New York, and London to restructure the company's debt, analysts wonder whether the Reichmanns haven't already played their best cards. Now

that the worst fears about O&Y have subsided, it may have little leverage remaining.

Instead, the banks appear to be holding the aces. In the weeks ahead, lenders will probably gain full access to O&Y's closely guarded balance sheet. Indeed, the Canadian court appointed a

THE REICHMANNS' LIQUID ASSETS ARE SLUMPING, TOO

O&Y has pledged much of its stock holdings as collateral for real estate loans. If the developer can't reach a debt agreement with its lenders, banks may claim these shares

DATA: DOMINION BOND RATING SERVICE LTD., COMPANY REPORTS

"information officer" from Price Waterhouse to ensure that the banks receive a full accounting. Bankers will also have far more influence on O&Y's operations. To many analysts, the question isn't whether banks will gain equity in O&Y but rather how much of a stake the banks will grant the Reichmanns. Some O&Y watchers even have begun to imagine O&Y's liquidation. Brian Neysmith, president of the Canadian Bond Rating Service, is one who thinks it may happen. He doubts the banks and O&Y will ever come to terms. "The chances are not good," he says.

In many ways, O&Y had little choice but to seek court protection. As defaults on its massive debts mounted, creditors closed in on O&Y's assets. A group of banks led by J. P. Morgan & Co., O&Y's own adviser, moved to seize collateral after O&Y defaulted on some swap commitments. The key threat would have come on May 15 in Toronto, where bondholders were preparing to seize First Canadian Place, the 72-story office tower that was Reichmann's first trophy project. Both the Reich-

manns and their lenders were frightened at a mad scramble by the more unruly the company's many creditors would sue.

Ironically, O&Y's global reach, which supposedly made it too big to fail, has added the impact of money troubles. Even though O&Y represents the biggest

private debt restructuring ever undertaken, the sheer number of its banks—91 in all—has spared any single lender from a life-threatening exposure. Even among Canada's six banks, which have lent the Toronto developer some \$2.5 billion, the impact is manageable. As a result, O&Y's protracted problems pose less of a threat to Canada's economy than previously thought. "I don't see it as having profound implications at all," says Lloyd C. Atkinson, chief economist at the Bank of Montreal.

Similarly, in Japan, O&Y's tribulations haven't caused much of a ripple in the already beleaguered banking community. Japanese banks are believed to have upwards of \$2.8 billion worth of O&Y loans on their books, but that pales in comparison to the \$154 billion in bad loans that Salomon Brothers Asia Ltd. figures that Tokyo bankers already have on their books. "It may be more than a drop in the bucket," says analyst Alicia Ogawa of S. G. Warburg Securities (Japan) Inc. "But it's not more than two."

BRAVE FRONT. Outside Japan, many banks have built a cushion against an O&Y default. Citicorp, for example, has already written off \$100 million of its loans to O&Y and classified much of its remaining \$380 million in O&Y loans as nonperforming. "It doesn't look like a major difficulty," says a senior official at the Federal Reserve. "I think we've escaped in pretty good shape."

That leaves O&Y in a precarious position as it tries to stretch out debt payments and arrange new loans. O&Y executives still sound brave. "This is not a liquidation [or] the end of O&Y," says Gerald Greenwald, a former Chrysler Corp. vice-chairman and now O&Y's new president. Maybe not. But O&Y now is in no position to dictate terms.

The first sign of the banks' tougher negotiating posture could emerge in London. O&Y got a boost from hints by the British government that it may move 2,000 civil servants to Canary Wharf. But O&Y will still have a hard time persuading the banks to lend \$550 million to finish the first phase of the project and make a downpayment on O&Y's share of the cost of building the Jubilee Line, the badly needed subway extension to Canary Wharf. "We're at a point now where the project is about to turn," says Michael Dennis, Canary Wharf's CEO.

The question, though, is who will own Canary Wharf at the end of the day? Bankers aren't likely to accept O&Y's offer of a straight 30% stake. Instead, they may turn the tables, offering O&Y equity on a sliding scale, dependent on the developer's performance. But even if O&Y wins a majority stake, it will be years, if ever, before Canary Wharf

reaches the size O&Y had envisioned.

Bankers also take a dim view of O&Y's other proposal, offering banks a 20% stake in the parent company in Canada in return for debt restructuring. "This plan won't be acceptable," predicts Alain Tuchmaier, an analyst at McLean McCarthy Inc., a Toronto brokerage firm, "because it doesn't offer enough concessions." Under Canadian law, O&Y will have to win approval from holders of three-fourths of its debt. If they refuse, O&Y would essentially be finished. The court has asked the company to submit a plan by July 13 and set an Oct. 21 deadline for approval, though that could be extended.

Meanwhile, Olympia & York faces a



PAUL REICHMANN: LITTLE LEVERAGE

struggle to keep its vast U. S. property holdings out of Chapter 11. The Reichmanns' New York trophies, such as the World Financial Center, aren't covered by the May 14 filings. Because those properties are the healthiest of O&Y's major operations, Greenwald argues "they should be able to work through their problems with the cooperation of their lenders." That may be asking too much. On May 19, O&Y told holders of \$548 million in debt issued against 55 Water Street in Manhattan that it couldn't meet interest payments. And there are worries that O&Y this summer

		1990 value	Current value
	Stake	Millions of dollars	
CANADA	75%	\$1,360	\$894
-PRICE	82	707	707
	35	711	266
PACIFIC	18	237	389
IS	15	95	71
E ENERGY	15	135	79
LITIES**	89	780	190
		4,200***	2,600***

negotiations to sell this holding
o., its major asset. Following that, it plans to go private
g small holdings not listed here

**GW is now selling

Top of the News

will default on its tax payments to New York City.

To be sure, few creditors are eager to take possession of O&Y's massive holdings if it means selling them in today's market. But while O&Y should manage to escape liquidation for now, it will be "drastically shrunken," predicts Tuchmaier. Eventually, workout specialists believe that banks will lay claim to much

of the equity in O&Y's properties in New York and Toronto.

In exchange for O&Y's survival, creditors are also likely to demand that Olympia & York sell most of its \$2.6 billion stock portfolio (table, page 26), which includes controlling stakes in Gulf Canada Resources and Abitibi-Price Inc., the world's largest newsprint company. The company already has plans to sell its

18% stake in Santa Fe Pacific Corp.

The Reichmanns won't disappear. The banks probably would prefer to have them manage the properties. But O&Y's standing as the world's premier developer is history. So is any notion that Paul Reichmann's empire is too big to fail.

By William C. Symonds in Toronto, with Mark Maremont in London, Ted Holden in Tokyo, and bureau reports

ROOM AT THE TOP—AND ON THE LOWER FLOORS, TOO

When it comes to the recession in commercial real estate, this really is a global village. Falling property values and pullbacks in real estate lending are becoming nigh-universal conditions, plaguing New York and Tokyo alike.

Worse, the only way to go is down. "Every city with a glut of office space can anticipate further drops in office-building values, as tenants complete the process of renegotiating their leases or moving to other buildings where the deal is better," says Jared Shlaes, a real estate expert in Arthur Andersen & Co.'s Chicago office. "It could easily take 20 to 25 years before we see a significant recovery in the world's office markets where there has been overbuilding."

The depth of the downturn varies from city to city, of course. But a common theme appears everywhere there's a glut: Even while the boom was waning, both speculative builders and their bankers seemed to have believed that the laws of supply and demand had been suspended.

FALLING DOWN. London, where markets are in a depression not matched since World War II, is the prime example of that phenomenon. At the darkest moment of the recession, a rash of new office space, including Olympia & York's Canary Wharf project, hung out "For Lease" signs. Rents, which soared to \$120 a square foot for super-prime offices in the late 1980s, have tumbled by 50%. "London is scraping along the bottom of an awful cycle," says Paul Orchard-Lisle, a senior partner of Healey & Baker, a big leasing agent. "It's a tenant's market and will remain so until 1995 or 1996 at least."

New York is another market where overbuilding, coupled with a reduction in demand from the financial-service sector, is taking a toll. Much of the job growth that led to the boom in office

building has been reversed by Wall Street cutbacks. Since 1985, there has been almost a 100% rise in office vacancies citywide, a 30% to 60% drop in the value of office property, and a 25% decrease in rents, says Lloyd N. Lynford, president of REIS Reports Inc., a New York real estate data-base firm.

upturn until the end of the decade. The crisis at O&Y, New York's largest commercial landlord, isn't expected to have much immediate effect. The real fallout will be seen as leases signed in the mid-1980s roll over and are renegotiated at far lower levels.

Oddly enough, the Reichmanns' fall will have little more than a psychological impact in Canada, because O&Y did most of its overreaching beyond its home turf. The market's fundamental weaknesses run far deeper. "The commercial real estate market in Canada will stay depressed for three to five years—not because of the Reichmanns, but because every major center in Canada is overbuilt," says Brian Neysmith, president of Canadian Bond Rating Service.

BRIGHT SPOTS. The same trouble afflicts the Scandinavian countries. After spiking up in the middle and late 1980s, property values are sinking fast in cities such as Copenhagen and Stockholm, and tenant demand is shrinking.

What few bright spots there are can be found in countries that have been least burned by recession. Germany, where there are few large commercial real estate developers, "really hasn't suffered from the overbuilding in the 1980s

that many other markets suffered from," notes Simon Mildé, chairman of Jones Lang Wootton North America. He adds, though, that there has been slight softening in the market there. Another exception: Hong Kong, where massive building has been matched by massive growth.

For the stouthearted, one European capital has a dearth of office space and the prospect of a business boom in coming years. But only visionaries need apply: That city is Moscow.

By Suzanne Woolley in New York, with Mark Maremont in London and bureau reports



The future for commercial real estate in New York is dim. Although rents are dropping, the vacancy rate is still trending up, and big sales are virtually nonexistent. Michael Giliberto, head of real estate research at Salomon Brothers Inc., doesn't predict an

In New York, many analysts don't expect an upturn until the end of the decade

JMB HUNG ON TO THE WRONG COATTAILS

O&Y's woes have put more than \$1 billion of JMB investments at risk

For a company that wasn't supposed to stumble, Chicago's JMB Realty Corp. sure has found the footing awkward lately. In March, the demise of Randsworth Trust PLC cost JMB its entire \$1 million investment in the London real estate firm. The 13 pension funds at JMB had recruited to invest along with it lost \$381 million more. Now, JMB finds itself entangled in the spreading financial disaster that is Canadian real estate giant Olympia & York Developments Ltd.

More than \$1.1 billion that JMB raised from investors during the mid-1980s is now at risk. The reason: Five JMB public partnerships and two private placements invested all or substantial portions of their money in joint ventures with O&Y. JMB purchased five Manhattan office buildings. Except for one disputed \$7.5 million payment, O&Y has kept up its obligations so far, but there's no guarantee it can continue to do so. "We have no

idea of knowing what they'll do," says JMB chairman Judd D. Malkin. "But they've gone through a lot of agony already, and they've still made their payments."

DOUBLE TROUBLE. While Malkin sounds confident, recent regulatory findings show cause for deeper concern. O&Y's troubles jeopardize the future of two JMB joint ventures and the ownership of at least two buildings bought in partnership with JMB, findings show. Mortgage foreclosures would spell double trouble for investors: loss of ownership and hefty tax bills, cause of JMB's speedy depreciation of its investment in the buildings. "You're going to have taxable income, but you're not going to get any cash from the foreclosure. Call it phantom income," says Kenneth Aquino, a tax partner at accountant Popper & Lybrand Inc.



MALKIN AND BLUHM: CAUTIOUSLY OPTIMISTIC

"If somebody bought it for tax benefits, it was a bad investment."

Those with the most to worry about are the investors who, through JMB, poured \$174 million into a joint venture with O&Y to buy 237 Park Ave., 1290 Avenue of the Americas, and 2 Broadway for \$1.4 billion in 1984. The venture's auditor, KPMG Peat Marwick, questions its "ability to continue as a going concern." The firm also says that JMB and O&Y may have to give up ownership of 125 Broad St.

For some of the JMB-O&Y buildings, the ride from No Vacancy to no good has been a short one. Take 2 Broadway, which was 97% leased until 1990, when now-defunct Drexel Burnham Lambert Inc. vacated 20% of the building's office space. Other tenant departures emptied an additional 8%. Last year, Kidder, Peabody & Co. decamped from 11% more. None of the space has been filled, and the partners have written down its value by \$39 million, to \$370 million.

WASTED BREATH. Not surprisingly, shares in O&Y-tainted partnerships are going begging in the secondary market. Today, investors can snap up each of the five funds with O&Y exposure for less than one-tenth of their original offering price. When Richard Hill, a 61-year-old Conrail engineer, tried to sell 10 JMB partnership units last week, one bidder offered \$20 each for investments that cost Hill \$1,000 apiece. "He shouldn't have wasted his breath," says Hill. "I don't want nothing to do with limited partnerships now. The general partner is the only one that makes out in the end."

JMB's final bill for the O&Y debacle isn't in yet. But the numbers are starting to add up. The firm has foregone \$16.7 million in management fees from O&Y-linked partnerships. And it has guaranteed a \$25 million bank loan to 245 Park. CEO Neil H. Bluhm says the

building's leases will soon generate enough cash to cover JMB's exposure. Plus, he says: "We never counted on those fees."

After O&Y, the Randsworth collapse, and a host of mortgage foreclosures in other limited partnerships, is bigger trouble ahead? Privately held JMB is so vast and diversified that it's impossible to know for sure. But this much is clear: The troubles are touching off alarms among JMB's most important customers—the pension funds that have poured more than \$10 billion into JMB's deals. "These have definitely been learning and humbling experiences for JMB," says Gary Hiatt, portfolio manager for San Francisco City & County Employees Pension Fund. Some JMB investors might say they've learned their lesson, too.

By David Greising in Chicago

WHERE O&Y IS HURTING JMB

Properties	JMB's exposure*	Problem
237 PARK AVE. 1290 AVENUE OF THE AMERICAS 2 BROADWAY	\$174 MILLION	JMB and O&Y each claim the other company owes it millions. JMB may just walk away from the buildings
245 PARK AVE.	\$124 MILLION	O&Y and JMB have put in \$69.4 million to cover operating losses, and they may have to kick in more
125 BROAD ST.	\$55.4 MILLION	Building is just 71 % occupied, down from 99 % a year ago

*Includes exposure of investors in JMB-sponsored partnerships

DATA: JMB REALTY CORP., BW



LOOMING THREAT: JMB AND O&Y MAY HAVE TO GIVE UP 125 BROAD STREET (LEFT)

THE SEC TRAILS A VALUE-HUNTER

An informal inquiry questions trading by Mutual Series Chairman Price

Michael Price prides himself on being a "value" investor, the kind who roots around to discover a stock or bond's intrinsic worth. His Mutual Series Fund group of mutual funds has gained a savvy reputation, though the group has been lagging behind the broad market in recent years.

Now, just as his funds are performing smartly again, Price may have more than value-hunting to worry about. BUSINESS WEEK has learned that the Securities & Exchange Commission's New York office last September opened an informal inquiry into Price's trading in R. H. Macy & Co. securities. It's also probing trading by Mutual Series, which includes Mutual Shares, Mutual Qualified, and Mutual Beacon funds and controls \$4.1 billion in assets.

According to an SEC memorandum, dated Apr. 1, the agency is looking into whether Mutual Series traded Macy's securities with inside information. The SEC also wants to know whether Price, who is Mutual Series' chairman and a Macy's director, violated conflict-of-interest laws by trading at the same time the funds were trading in the same securities.

So far, the SEC has received trading records and related documents from the funds and Price, which they volunteered to hand over. Price confirms the informal inquiry but says that he is unaware of its focus. And he vehemently disputes that he or the funds did anything improper. Ron Geffner, an SEC attorney



MICHAEL PRICE STRONGLY DENIES MAKING IMPROPER TRADES

handling the case, declined to comment.

The current investigation is not Price's first brush with regulators. In December, 1988, the money manager and his late mentor, Max L. Heine, agreed, without admitting liability, to be censured by the SEC for not fully disclosing that they received approximately 50% of the brokerage commissions—or some \$2.4 million—paid by the mutual funds to an affiliated brokerage firm from January, 1985, to March, 1987.

At the time, the SEC also examined the propriety of investments by Price and others in securities purchased by the funds, including a 1986 purchase of Macy's preferred stock. Price says a 1987 internal review resolved "the issues raised by these purchases." But as part of the SEC settlement, Price pledged to clarify the funds' ethics codes regarding

"contemporaneous transactions in securities" by a fund and persons with access to its investment decisions.

The current investigation grew out of an SEC staff examination conducted from Oct. 10, 1990, to Nov. 27, 1990. According to the SEC memo, the exam revealed that Price, "on more than one occasion executed trades at approximately the same time and in the same securities as Mutual Series." The trading included the Macy's securities: From his seat on the board, Price would have access to inside information.

The agency is studying whether such trading amounts to an illegal conflict of interest in violation of section 17(d) of the Investment Company Act. "The danger," says Tamar Frankel, a Boston University law professor who wrote a treatise on the act, is that the money manager would "manipulate the trading in the fund's portfolio to profit his personal portfolio," such as by selling before the fund. Price says his own trading is "strictly governed" by the funds' ethics code. Macy's declined to comment.

The SEC also is looking into "allegations" that Mutual Series traded Macy's securities on the basis of inside information about the retailer's Jan. 27 bankruptcy filing. In June, 1991, Mutual Series owned two classes of Macy's bonds and 1.1 million shares of Macy's preferred stock. But by December, a few weeks before the Chapter 11 filing, Mutual Series did not list Macy's bonds in its portfolio. Price says that the fund "intermittently sold" the bonds throughout 1991, with the last sale on Nov. 4, 1991, but that he had "no information" that Macy's planned to file for bankruptcy. Price says he "routinely consulted" with lawyers about the propriety of Macy's trades, and that neither he nor the funds "ever traded Macy's securities on the basis of nonpublic information."

FUZZY LAW. Nothing may come out of the inquiry. The SEC would face an uphill battle in proving that any trading actually violated the law. Trading on the basis of inside information is clearly illegal when equity securities are involved, but the law is murky when applied to debt. The law governing "joint" trading by fund managers is equally fuzzy. Moreover, the probe is only in an early stage. As of Apr. 1, it hadn't been formally approved by the SEC in Washington.

Still, the memo notes, the New York office intends to ask Macy's for a chronology of events leading to its bankruptcy filing and compare it with the funds' trading in Macy's securities. The office also intends to request, "if warranted," Michael Price's personal testimony.

By Michele Galen and Laura Zinn in New York

...ception ...
("Mutual Series"), an open-end management investment company, was
conducted by the Staff from October 10, 1990 to November 27, 1990.
The staff's examination revealed that Mutual Series' President and
Chairman of the Board, Michael Price ("Price"), on more than one
occasion, executed trades at approximately the same time and in the
same securities as Mutual Series, in possible violation of Section
17(d) of the Investment Company Act and Rule 17d-1. Among the
securities in which such trading occurred are securities of R.H. Macy
& Co. ("R.H. Macy"). Price is a director of R.H. Macy.

IN A MEMO, THE SEC SAYS IT WANTS TO KNOW ABOUT TRADES IN MACY'S SECURITIES

LET'S GET SOME GUIDELINES FOR FOREIGN DEFENSE SALES

Forget Capitol Hill tussles over the B-2 Stealth bomber and the Seawolf submarine. For political fireworks, it's hard to beat the struggle over the future of LTV Corp.'s defense and aerospace division. In April, a federal bankruptcy judge approved a \$450 million bid for the LTV business, made jointly by France's Thomson-CSF and investment bank Carlyle Group. Martin Marietta Corp. and Lockheed Corp., whose \$385 million offer lost out, have mounted a vigorous campaign to block the deal. Their charge—that if a company 58% owned by the French government gains control of vital missile technology, both national security and U.S. competitiveness will suffer—has won the support of many on Capitol Hill.

An interagency review panel has until July 20 to recommend against the Thomson deal, and the decision will do much to shape the future of the defense industry. Deep military spending cuts around the world are forcing a global consolidation, and contractors are ripe for takeovers and purchases of cast-off units. Yet the nation lacks a well-defined policy for dealing with foreign acquisitions of defense companies. Now is the time to fix that.

NO TEETH. Concern about the erosion of the U.S. industrial base and the loss of vital military secrets has prompted calls for curbs on foreign ownership. But prohibiting all foreign acquisitions of U.S. defense companies could backfire. Military readiness does not demand that Americans own every widget maker that sells to the Pentagon. European companies already own some second-tier U.S. defense companies. Foreign ownership may even be beneficial if it brings new technology or bolsters a financially ailing U.S. company.

The problem is where to draw the line between benign foreign investment and acquisitions that endanger U.S. control of key technologies. In 1988, Congress passed the Exon-Florio Amendment, which authorized the President to block foreign takeovers

that could impair national security. The measure empowered the Committee on Foreign Investment in the U.S. (CFIUS), an interagency group headed by the Treasury Dept., to investigate foreign acquisitions of U.S. high-tech firms.

But while CFIUS has a broad mandate, it has no clear criteria for evaluating security risks. What's more, the Bush Administration warmly welcomes

even beneficial foreign investments.

Removing Treasury's control of CFIUS would be a good start. "Since the Treasury's chief mission is to defray the deficit, it is reluctant to do anything to hurt its ability to attract foreign investment," says Susan J. Tolchin, professor of public administration at George Washington University. The Commerce Dept., which monitors industrial data, should take the lead.

TOO FEW HANDS? A more explicit definition of threats to national security, based on the sensitivity of the technology in question and alternative sources of supply, would give CFIUS some focus. The idea is to adopt rules based on those used in antitrust law to determine whether supply of critical products or technologies would be concentrated in too few hands. If so, the sale would be blocked. "The guiding principle is no concentration in global markets, no threat to national security," says Theodore Moran, a professor of international business at Georgetown University.

Even so, there are undoubtedly a few military goods or technologies that are so sensitive or essential to security that governments will always insist on domestic suppliers. Fighter planes are one example. But it shouldn't be too hard for the Pentagon to draw up a discrete list, culled from its table of critical technologies. This could even take the form of legislation barring the sale of companies producing key technologies. Another factor to consider would be the involvement of a foreign government in a contested bid for a U.S. defense contractor.

Under these criteria, it probably doesn't make sense to allow the LTV sale. The LTV unit is one of the top 20 U.S. defense contractors, with few if any competitors for its advanced missile systems. Yet regardless of how the Administration rules on LTV, it should rethink its decision-making process. Given the sharp contraction of the defense industry, the debate over foreign ownership will only get hotter.



foreign investment. As a result, of some 700 foreign takeovers it has examined in nearly four years, CFIUS has extensively reviewed only 13. Bush blocked just one, a Chinese investment in a small aerospace parts maker.

The debate over the LTV unit's future is rekindling congressional ire over CFIUS's track record. If the Administration is smart, it will bolster the panel and broaden and clarify its standards. Otherwise, Congress might take an approach that could thwart

Antitrust law offers a model for the standards necessary to protect both the economy and national security



SPENDING ON THE ELDERLY ACCOUNTS FOR MORE THAN A THIRD OF ALL MEDICAID OUTLAYS

DOWN AND OUT IN TEXAS, CALIFORNIA...

Massive deficits have states reeling, and the recovery won't help much

The recession may be over, but in state capitals the agony goes on. Just look at the recent news from around the country: Unable to close a staggering \$9 billion deficit, California is preparing to pay vendors in IOU's, not cash. Texas is scrambling to close a projected \$4 billion-plus shortfall in the next budget cycle. Florida lawmakers and Governor Lawton Chiles are at war over his plan to raise \$1.3 billion in new taxes.

A fiscal crunch aggravated by the recession has turned legislative chambers into battlegrounds. Costs, especially for health care and prisons, are rising at record rates. Cities, reeling from the decay that helped spark the Los Angeles riots, are begging for help. The federal government, struggling with its own deficit, may be about to shift even more costs to the states. And tax hikes and service cuts have left voters in a surly mood.

But the worst news for states—and their taxpayers—is that a modest economic recovery won't bring much relief. The pain

will continue long after the 1990-1992 slump fades into memory. Like the federal government, states have developed structural deficits, with revenues failing to keep up with soaring costs. "This is not just the recession," says Brian M. Roherty, executive director of the National Association of State Budget Officers. "You can't just put your feet up and wait for the turnaround." The up-

shot: Governors and lawmakers are thinking about major overhauls of their revenue systems, including value-added taxes.

Revenue hikes are a last resort, but it's getting tougher to cut spending. Outlays for jails and prisons increased last year by more than 11%. But the public clamor for stiffer sentences precludes cuts. Welfare is a popular target. But since 1976, state spending on public assistance has been slashed. By 1990 states were spending more to keep people in jails and prisons than on cash payments to the poor.

Unlike corporate executives, governors have been unwilling or unable to slash their labor forces. Despite the recession, states trimmed employment this year by less than 1%. Not only do public employee unions resist the cuts, but so do many voters, who fear losing services. In Maryland, Democratic Governor William D. Schaefer helped build support for a \$1 billion tax hike by threatening to lay off state troopers.

States are passing the fiscal distress down the governmental food chain. This year, 11 have cut aid to cities and counties, and others are shifting programs to local government, forcing them to scramble for funding.

BIGGER UMBRELLA. Even if states can find some spending reductions, the savings could well be overwhelmed by the explosion in medicaid costs. Medicaid benefits for the poor under the federal state program are increasing by a staggering 20% a year and now account for 16% of state budgets. In Florida, medicaid costs have grown by nearly 500% over the past 10 years. "Health care," says state Budget Director Douglas Cook, "kills us all."

Many of the increases are beyond the states' control. Medicaid is suffering from the same cost explosion as all health care. Moreover, Washington, which pays about half the cost and makes the rules, has been forcing states to expand coverage. Until recently, pregnant women and children were covered only if they were on welfare. Now, states must provide benefits to poor pregnant women and to poor children 6 and under.

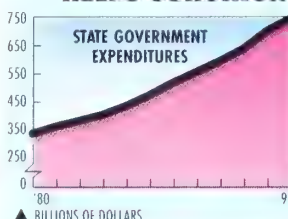
Still, services to pregnant women and children accounted for only one-third of the increase in medicaid spending in the late 1980s, according to the General Accounting Office.

FISCAL DISTRESS IS PASSED ON TO CITIES

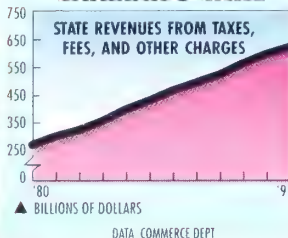
GET PRIORITIES STRAIGHT



AS STATE SPENDING KEEPS SURGING...



...SO DOES THE TAXMAN'S TAKE



COULD ANYTHING BE FINAH THAN TO BE IN CAROLINA?

Spartanburg, S.C., is going all out to woo a huge new BMW factory



WILLKOMMEN, Y'ALL: HOLLAND WANTS BMW TO MOVE IN

Gerald W. Holland sure hopes he'll be moving soon. The retired photo engraver is waiting to hear whether German luxury carmaker BMW will build a \$1 billion factory smack on his four acres of property, about 15 miles south of Spartanburg, S.C. State politicians are so eager for the 1,800-plus jobs the new plant would create that they've offered Holland and his neighbors at least twice the value of their land. For Holland, that could amount to almost \$400,000. He says: "With prices like that, who minds moving?"

Holland isn't the only one extending a warm Southern welcome to the German auto maker. In April, South Carolina Governor Carroll A. Campbell Jr. signed a bill to provide \$35 million worth of incentives for BMW to come to Spartanburg. And that is on top of \$5 million in state income tax credits. South Carolina businesses kicked in an additional \$3 million to help train potential BMW employees. And Spartanburg Mayor Robert Rowell, worried about offending the German company, tried to dampen pub-

licity about a proclamation he signed commemorating victims of Nazi anti-Semitism. BMW officials assured the mayor that the proclamation didn't offend them.

TIGHT LIPS. South Carolina's exertions may come to naught, though. Local rumor has it that BMW executives met recently to discuss possible sites. Spartanburg officials believe the competition has narrowed to a showdown between their town and Omaha. But a spokesman at BMW of North America Inc. headquarters, in Woodcliff Lake, N.J., says Spartanburg is just one of a handful of sites BMW is considering around the world for its second non-German assembly plant.

And he won't say when the company will pick a site.

This corner of South Carolina could use a boost. The unemployment rate in Spartanburg County is 5%, far healthier than the 7.2% national average. But the nearby counties of Laurens and Union post jobless rates of 6.5% and 9%, respectively. And the jobs BMW would add pay well. U.S. auto workers earn an average of about \$32,000 a year, compared with the \$25,000 a Spartanburg manufacturing worker earns in a good year. Economists figure the plant could generate more than \$500 million in revenues for the state over the next decade.

A BMW plant would be the undisputed leader of a long list of foreign investments in the county. Determined not to get stuck with a raft of dried-up mill towns when textile jobs started disappearing in the late 1970s, state officials went into high gear to woo foreign manufacturers.

The program paid off. South Carolina now leads the nation in per capita foreign investment, with a good deal of that to be found in Spartanburg



The states must also cover the disabled and elderly poor. Spending on the elderly—mostly for nursing-homes—accounts for more than a third of all medicaid spending. "There is no long-term-care program in this country, and that means that people are dumped into medicaid," says Samuel S. Flint, an official at the American Academy of Pediatrics.

And Washington may be about to turn the screws even tighter. With President Bush's support, lawmakers may soon adopt a constitutional amendment mandating a balanced federal budget. At the same time, Bush is urging Congress to adopt an annual cap on federal spending for such entitlements as medicaid. Under either scheme, it's a good bet that states will shoulder more of the burden.

That means more pressure on state and local taxes. This year, taxpayers in most states got a relative breather. After raising taxes by \$25 billion in the past two years, states this year have hiked levies by about only \$5 billion.

TAXING HAIRCUTS. But now state officials are beginning to discuss major tax reform. In Florida, Democrat Chiles has proposed taxing 99 goods and services now exempt from the state sales tax—everything from haircuts to legal fees. In 1987, voters forced then-Governor Bob Martinez to rescind his plan for a broad service tax. This time, GOP lawmakers are urging spending cuts instead. But, insists Doug Cook, Chiles' budget aide, "We're not going to practice budget anorexia. 'No new taxes' is not a credible response to the future."

The endless crunch is pushing Florida to consider a more drastic step—a state VAT. And the idea of substituting a consumption levy for existing business taxes has won the backing of the state Chamber of Commerce. "Regardless of how much money they want," says Chamber General Counsel S. James Brainerd, "they have to have a better way of raising it." In Texas, Comptroller John Sharp has proposed a 3.75% VAT to replace the current school property tax and corporate franchise levy. The plan will go nowhere this year, despite an anticipated budget shortfall in coming years. Texas business opposes it, but the idea won't go away.

Right now, there seems to be nothing but more pain ahead for beleaguered governors and legislators. Says Steven Gold, director of the Center for the Study of the States in Albany, N.Y.: "We're going to have to get a lot tougher on spending, and we're going to have to raise taxes." But just as Washington may be giving taxpayers a respite, states will be looking for ever more inventive ways to pay their bills.

By Howard Gleckman, with Susan B. Garland, in Washington, Gail DeGeorge in Miami, and bureau reports

Top of the News

County. Michelin, Hoechst Celanese, and Adidas USA now all have large operations there and compete for labor with textile giants such as Milliken & Co. and Spartan Mills. Attracted by low labor costs, right-to-work laws, good transportation, and tax incentives, foreign companies have invested more than \$1.5 billion during the past 25 years. That's an impressive number for a county with a population of 226,800.

The BMW plant, with its proposed \$1 billion budget and 500-acre site, would dwarf anything Spartanburg has seen so far. As to what it would build there, the

company says only that it would be a variation on an existing model.

As the deadline nears, Omaha will have to go some to beat Spartanburg's enthusiasm. The incentive package includes \$25 million in bonds to buy and improve the land, which the state would then lease to BMW for a nominal fee. An additional \$10 million is earmarked for improving roads near the site. Real estate developers are pitching in with five rent-free floors of a nearly empty downtown office building.

In fact, it's hard to find anyone opposed to the BMW plant. About the only

concern comes from employers worried about competing with auto workers' traditionally high wages. "BMW will no doubt draw employees from existing industries," says MacFarlane L. Cates Jr., president of Arkwright Mills. "That will mean some additional training costs for us as we hire new employees."

But most people see the BMW plant as a windfall. "The way I look at it," says Gerald Holland, "BMW is making money." Rich enough to drive a BMW, if not a Mercedes.

By Walecia Konrad, with Betsy Teter, in Spartanburg, S. C.

INVESTMENTS



DOLLAR DAZE: 'EVERYTHING'S \$1.00' SPREAD ITS 1991 STORE-OPENING COSTS INTO '92

VALUE MERCHANTS MAY HAVE STRETCHED A BUCK TOO FAR

Stockholders charge the discount chain with inadequate disclosure

Value Merchants' Everything's \$1.00 stores are a kitsch-collector's dream. You can find hand-painted porcelain cocker spaniels, boxes of Bill & Ted's Most Awesome Breakfast Adventure cereal, and Wisconsin Badgers car shades—all for a buck each. "I think it's great," gushes Faye Elam, a 40-year-old homemaker from Oak Park, Ill. "I can get just what I need for \$1!"

Some investors are less enthusiastic. A shareholder suit filed in U.S. District Court in Milwaukee on May 12 charges that Value Merchants Inc.'s top two officers, CEO Steven J. Appel and Finance Vice-President Ronald E. Skelton, violated federal securities laws by failing to

disclose promptly that the company could match its 1991 earnings forecast only through an accounting change, which added 12¢ a share, or 9%, to its 1991 bottom line. The change, acceptable under accounting rules, boosted 1991 earnings by spreading store opening costs over a longer period. "I can understand why information might be considered incomplete if the only way the company achieved its results was through accounting changes," says Robert A. Bayless, a senior accountant at the Securities & Exchange Commission.

The plaintiffs allege that Value Merchants should have disclosed that by shifting more costs into the coming year,

the change would hurt 1992 results. Indeed, on May 7, when the company acknowledged that its first-quarter loss would be deeper than projected, partly because of the deferred costs, its stock plunged 4%, or 22.3%, to 16%.

The company says it has complied with all securities laws and believes the suit is without merit. Appel and Skelton declined to comment, as did Value Merchants' outside accountant, Arthur Andersen & Co. A spokesman says that they are too deeply involved in negotiations to arrange financing for 1992 store expansions to be interviewed.

The fresh financing is crucial. Value Merchants says it needs \$50 million to \$55 million in funding to open the 200 Everything's \$1.00 and 25 Toy Liquidators stores it has planned for 1992. The openings would nearly double its existing stores and boost 1992 sales to \$400 million, from \$235 million. But they'll also help create an estimated cash drain this year of \$37 million.

Keeping up the growth streak may be the only way to prop up Value Merchants' stock. Last year, the company's shares zoomed from 11 to as high as 42, touching down at 31¼ at yearend. But in the last half of 1991, several outside directors dumped large stakes. And this year, the company announced that Everything's \$1.00 same-store sales growth slowed from 17.8% in 1990 to 3.9% in 1991. Short sellers began circling, driving the stock as low as 14.

MISGIVINGS. Thomas R. Kully, an analyst at William Blair & Co., the investment bank handling the financing deal, says it probably will get done within 60 days. Yet even Kully, a bull on the stock, says the company's torrid growth has "encouraged less-than-conservative accounting." Value Merchants would not comment on that statement.

Whatever its outcome, the suit raises serious questions about Value Merchants' future. If the charges are borne out, the company's stock could end up in the closeout bin.

By Julia Flynn in Chicago

THE NUMBERS AREN'T CRUNCHING CRAY RESEARCH

Weak earnings have sent the stock down—but that may not last long

A analyst Barry F. Bosak has a hand on his forehead and a bilious expression on his face. His tablemates stare with consternation at the gluey-cheese "quicheburger" lunch served up following Cray Research Inc.'s May 14 annual meeting in Minneapolis. But the stock market, not food, is what has Bosak upset. Even as he dines, Cray Research shares are trading down, down, down, to end the day 15% lower, at 32 3/4, on bad earnings news (chart). "I had a 'buy' on the stock," moans Bosak of Smith Barney, Harris Upham & Co., as his eyes search for some sympathy.

Like plenty of other analysts, not to mention stockholders, Bosak wonders when supercomputer king Cray Research will get its earnings act together. After a period of flat sales, revenues are beginning to take wing. And the company keeps insisting that revenues will climb at least 10% this year, to \$949 million, atop a 7.2% boost last year. But profits have not kept pace.

HEERLEADER. In April, Chairman John L. Rollwagen told stock analysts the company would scratch out at least a small earnings gain this year, after a measly 3.2% increase in 1991. But on May 13 he changed his mind, announcing instead that earnings might plunge 10%. The surprise announcement sent the stock tumbling the next day. "To have own earnings and revenue up 10% really doesn't jibe," says a puzzled Bosak.

Despite the bad news, the ever-ebullient Rollwagen is pushing the cheer meter to its limits. "Talk is cheap, I know that," Rollwagen says. "But I'm very optimistic about where we're going and where we'll be a year from now. This is one of the great buying opportunities for Cray Research stock."

At last, Rollwagen believes, the grand strategy he began stitching together after founder and former chairman Seymour R. Cray resigned in 1989 is taking hold. Cray left to pursue his own unorthodox design for the fastest computer on earth. But Rollwagen stayed put to push a different vision: He thinks a ro-



"VERY OPTIMISTIC": ROLLWAGEN SAYS HIS GRAND STRATEGY IS FINALLY TAKING HOLD

bust supercomputer company should offer an array of products to provide superpower to a customer's entire computing network—a concept known as network supercomputing. Seymour Cray's troubled Cray Computer Corp. has yet to ship its first product; Rollwagen's approach is piling up converts.

Superfast machines with price tags as

as an afterthought, Rollwagen has dramatically boosted spending on operating-system, networking, and applications software to the point where it now accounts for half of research-and-development spending.

To help link his supercomputers with networks of science and engineering workstations made by Sun Microsystems Inc., Rollwagen late last year bought networking technology from bankrupt FPS Computing, formerly known as Floating Point Systems Inc. And with the help of \$12.7 million in Pentagon funding, Cray Research launched a project to build massively parallel supercomputers, which would link 1,000 or more microprocessors to reach nearly unfathomable computing speeds of up to 1 trillion calculations a second.

FRUITFUL STRATEGY? Over the next 12 months, Rollwagen expects this strategy to bear fruit. Cray Research's brand-new Y-MP C90, which costs as much as \$30.5 million, already has taken at least nine orders. At the low end, the company has sold 50 of its new EL machines and expects to build up to a production rate of 350 a year.

But it's earnings, not sales momentum, that has analysts worried. Now, Rollwagen must prove he's as good an operator as he is a strategist. Part of this year's profit drop stems from tougher-than-expected price competition in midrange systems from the likes of Convex Computer Corp. and IBM. But blame manufacturing, too. High scrap rates on the C90's 52-layer, gold-plated circuit boards will trim several million off profits this year. Overhead could use some trimming as well. Rollwagen says he'll keep total employment at current levels

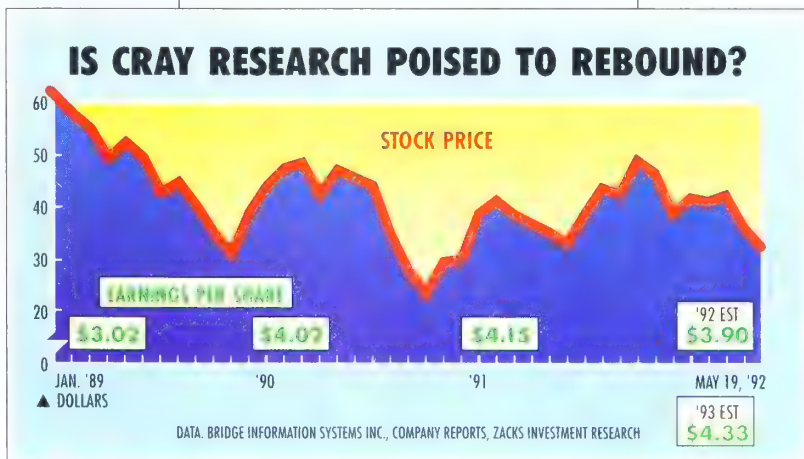
but move executives from headquarters into the field. Meantime, he'll be driving hard on day-to-day cost control: Rollwagen himself has abandoned first-class flying.

Wall Street seems to be giving Rollwagen the benefit of the doubt. Although the stock hasn't recovered from its mid-May stumble, most analysts, expecting strong 1993 earnings, still rate it a buy. And Rollwagen

boasts that the next time Cray Research stock goes as low as its recent low of 32, it will be because the stock has split.

That would be good news for Cray Research's luncheon guests. It might even make those gluey quicheburgers palatable.

By Russell Mitchell in Minneapolis



high as \$30.5 million remain Cray Research's bread and butter, but Rollwagen now is trying to seed new customers with starter machines—an anathema to Seymour Cray—like the new Y-MP EL, which costs as little as \$300,000 and will be sold in a cooperative arrangement by Digital Equipment Corp.'s sales force. And while Seymour Cray saw software



IF YOU THINK HIGH TECHNOLOGY REQUIRES INNOVATION, IMAGINE INSURING IT. Advanced scientific disciplines like solar cell technology and genetic engineering are exploding with possibilities. And fraught with hidden risks. The professionals at AIG Companies who underwrite these and other specialty risks possess a much-sought-after talent: the ability to evaluate the unknown and



assess businesses on the cutting edge of technology. Over the years we've developed the necessary rational skills and intuitive talents to a degree most others have not. It's part of why AIG is a global organization known for its innovative insurance solutions. Particularly when dealing with endeavors as complex as capturing the energy of the sun.



WORLD LEADERS IN INSURANCE AND FINANCIAL SERVICES

American International Group, Inc., Dept. A, 70 Pine Street, New York, NY 10270.

TEMPEST IN A B-SCHOOL

Rochester's Dean Mayer quits in a funding squabble with the president

It's common to hear business school deans moan privately about how their universities mistreat them. Some grouse that their institutions are used as cash cows: milked for money to subsidize arts and philosophy majors. Other deans lament that they fail to get the respect their schools deserve.

It's far less common for B-school deans to go public with their complaints. But that's just what's happening at the University of Rochester's William E. Simon Graduate School of Business. A mere eight months after taking the job, Dean William E. Mayer resigned on May 7 over a funding dispute. His abrupt departure shines a spotlight on a long-simmering feud between university President G. Dennis O'Brien and the Simon School.

A former Wall Street executive, Mayer arrived in Rochester, N. Y., last year with a mission to increase the school's prominence: In BUSINESS WEEK surveys of top B-schools, it has twice been ranked as 20th in the nation. Mayer quickly gained a following among the school's well-regarded faculty and students.

But Mayer soon found he had few resources available for raising the school's standing—a highly competitive business.

"Wharton spent a quarter of a million dollars to find out what business wanted in its MBAs," Mayer says. "Chicago spent nearly a half-million on its leadership program. I had to do it with a couple of mirrors and Band-Aids."

'FATAL CUT'? O'Brien says the resignation—prompted when he rejected Mayer's request to spend \$250,000 to hire a marketing firm—took him by surprise. He says Mayer sent him a memo detailing his concerns over the budget. "But I have a lot of memos from deans concerned about their budgets," O'Brien adds. "I didn't believe that the amount of money we were talking about would cause him to resign."

Simon faculty members fault O'Brien for failing to recognize the importance Mayer attached to the issue. They fear the contretemps has dealt a blow to the B-school. "This is a grievous and serious wound, possibly a fatal cut," says former Dean Paul W. MacAvoy. "What kind of national leader is O'Brien going to get to come to Monroe County to sit in that office and pull the school into Stage Two?"

For O'Brien, a bow-tied professor of

to raise \$30 million for the B-school.

Aside from all the brickbats, O'Brien also has presided over one of the weakest-performing endowments at any major university. A decade ago, Rochester boasted the seventh-largest endowment among U.S. universities. It now ranks 20th, with a market value of \$578.4 million in fiscal year 1991. While the funds of the largest 20 have tripled in value, on average, since 1981, Rochester's has risen a measly 15%. If its capital had grown at merely the average of the 20 largest, Rochester would easily boast an extra \$60 million in income a year.

NO RUSH. Why the dismal record? Not obsessive financial conservatism. The university has clung to a risky strategy of investing in fledgling enterprises and venture-capital funds. When O'Brien became president in 1984, 75% of the funds were tied up in either venture-capital or small-capitalization stocks. O'Brien didn't rush to shift strategies. "We waited for the investments to mature rather than sell," explains Richard W. Greene, university treasurer.

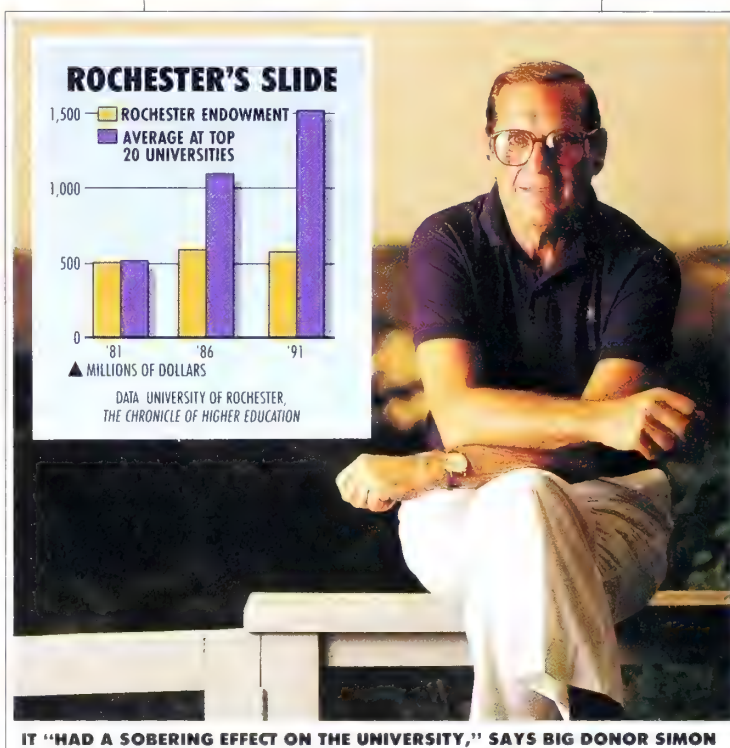
Bad move. The endowment since has been reorganized, but its value has actually fallen in the past five years. Says O'Brien: "I can't argue against the figures. The endowment's performance has made it more difficult for the university overall. But the Simon School has suffered less than other schools."

That reply doesn't appease O'Brien's critics. "They need operating money, so they're draining the business school," complains a member of the Simon School's advisory committee. Indeed, the business school's financial support to the university is

budgeted to hit \$3.6 million in the June 1993, fiscal year, up from \$1.2 million five years ago. A contribution that large would force the B-school into a 1993 operating deficit of about \$600,000. O'Brien's defenders say other such schools are in a similar pinch.

Maybe so. But not many universities have posted an investment record as poor as Rochester's. William Simon hopes that some good may come of the blowup. "It has had a sobering effect on the university," he says. "They now have to make an earnest commitment to the school." But it will come too late to keep a well-respected dean on campus.

By John A. Byrne in New York



philosophy, the incident is an embarrassment—and the most recent manifestation of deeper financial woes at Rochester. Five years ago, he came under attack after he rescinded the admission to the B-school of a Japanese manager from Fuji Photo Film Co. He acted after Eastman Kodak Co., a Rochester neighbor and a big donor to the school, complained. In 1990, O'Brien got into hot water when he told the Class of 1965 that its modest \$50,000 gift to the university was "not worthy of you." He was forced to apologize for the remark. And he argued for years over funding with MacAvoy, who with former Treasury Secretary William E. Simon helped

Canon introduces the CJ10 color copier, printer, scanner.



Now the power of color is yours.

With the CJ10 on your desk top, you can make remarkably high-quality full-color copies and overhead transparencies.

In fact, CJ10 copies have virtually the same picture-like clarity and crisp, black text as copies made by Canon's renowned Color Laser Copiers. And, with a simple option, the CJ10 connects to your computer so you can scan and print in high-quality color too.

The complete CJ10 desktop full-color system lets you create such effective color documents that it could be the most powerful business tool ever put on a desk top.

It's easy to use, easy to maintain, and priced so that it's easy to afford. With a CJ10, the power to improve your image is finally within your reach.

For more information, simply call 1-800-OK-CANON.

CJ10
COLOR BUBBLE-JET COPIER

Canon

EDITED BY HARRIS COLLINGWOOD

THE ART MARKET RALLIES

The art world is breathing a sigh of relief: Results of May's big New York auctions of Impressionist, modern, and contemporary paintings suggest that prices have stabilized. American collectors—not Europeans or Japanese—did more buying this time, and Mexicans emerged as active bidders. Among those raising their paddles: Carl Icahn, Michael Steinhardt, Sam Heyman, and Ignacio Cobo, head of Mexico's Choice International Hotels. Latin art is sagging a bit, however—a victim of too many high-priced works on the block.

Works sold at Christie's and Sotheby's auctions

May '91 May '92

CONTEMPORARY	74%	75%
IMPRESSIONIST, MODERN	71%	79%

LATIN AMERICAN	70%*	69%
----------------	------	-----

*CHRISTIE'S ONLY

DATA: CHRISTIE'S, SOTHEBY'S

U.S. AUTO MAKERS GET A REASON TO CHEER

► The Commerce Dept. turned up the heat on Japanese auto makers with its May 19 ruling that Mazda and Toyota are dumping minivans in the U.S. The agency was already pressuring the companies to increase their purchases of U.S. auto parts and their sales of U.S. cars in Japan. Japanese luxury cars may be Detroit's next target.

U.S. auto makers face one more hurdle: convincing the U.S. International Trade Commission that cut-rate Japanese minivan sales are harming the U.S. industry. That decision is due by the end of June. If Mazda and Toyota lose, they are likely to hike minivan prices rather than pay antidumping duties.

GM'S OFFERING MAKES A HUGE SPLASH

► On the heels of the Commerce Dept. decision, one of the Big Three, General Motors,

had more to celebrate the next day. The giant auto maker on May 20 launched the public offering of 55 million shares of common stock, raising \$2.15 billion. The offering was so popular that it was oversubscribed by 10%.

It was the biggest public stock flotation ever by a U.S. company—and a cheering vote of confidence in the loss-beset carmaker. Priced at \$39, the shares weigh in at 144 times the 27¢-per-share median analyst estimate for 1992, according to Zacks Investment Research. If car buyers start to show that kind of enthusiasm, GM has little to worry about.

CASSONI'S ILLNESS SHAKES UP XEROX

► Xerox Executive Vice-President Vittorio Cassoni returned to his native Italy on May 18 for radiation treatment for an inoperable brain tumor. Cassoni's illness is a sudden and unexpected turn of events for Xerox, which is reorganizing to expand productivity and respond faster to customers and markets. It hired the former Olivetti executive last month to bring his computer expertise to Xerox' \$13.8 billion document-processing business.

Cassoni is head of U.S. customer operations and four key business divisions. These units will report on a tempo-

rary basis to CEO Paul Allaire. A company spokesman says it is unclear when or if Cassoni will return to Xerox.

PEPSI CUTS A SLICE OF DESIGNER PIZZA

► Hold the pepperoni—PepsiCo sees a future in upscale food. On May 20, it bought 50% of California Pizza Kitchen, the Los Angeles-based maker of posh pies topped with barbecued chicken, Peking duck, or Cajun sausage. PepsiCo, which owns Pizza Hut, Taco Bell, and Kentucky Fried Chicken, paid an undisclosed amount for half of the

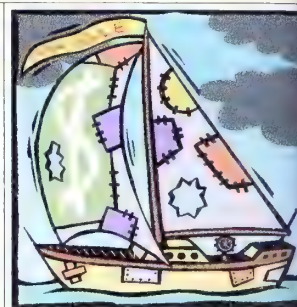
ONE WAY TO STAY AFLOAT

Just what New York needs: another commodities exchange. But not just any commodity.

Get ready for the New York Yacht Exchange, brainchild of Emilio Azcarraga. It's a way for the Mexican media magnate to wring some cash out of his Manhattan yacht port, North Cove Harbor, which he set up in 1989, just as the New York real estate market was swooning.

Since a recession isn't a great time to sell patches of water for \$1 million to \$2 million apiece, Azcarraga is revamping North Cove so that it offers what the times demand. Now, captains without cash flow can berth their boats on Manhattan's southern tip while they seek a buyer. They won't pay docking fees until they sell.

If the Yacht Exchange is successful, Azcarraga may be left without a place to dock his own vessel, the 241-foot *Eco*. These days, he has the whole south side of the harbor to himself.

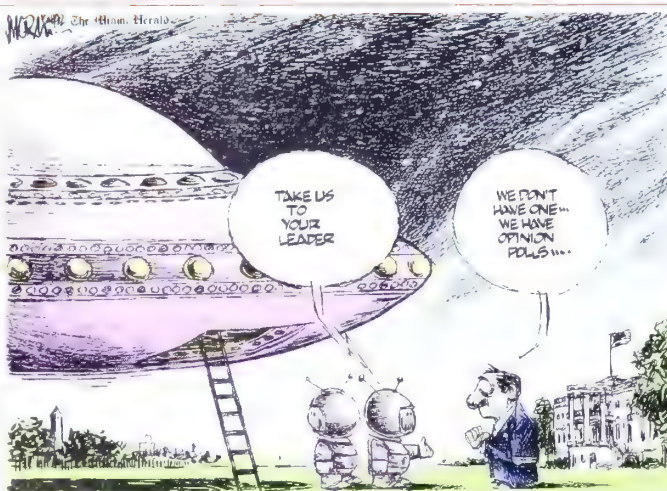


privately held 25-restaurant chain, which has annual sales of about \$60 million.

CPK founders Larry Flax and Rick Rosenfield, former criminal lawyers who opened their first pizzeria in 1985, will continue to manage the West Coast chain. With PepsiCo, growth at CPK will be "absolutely faster," Flax says. It has been adding one restaurant a month lately.

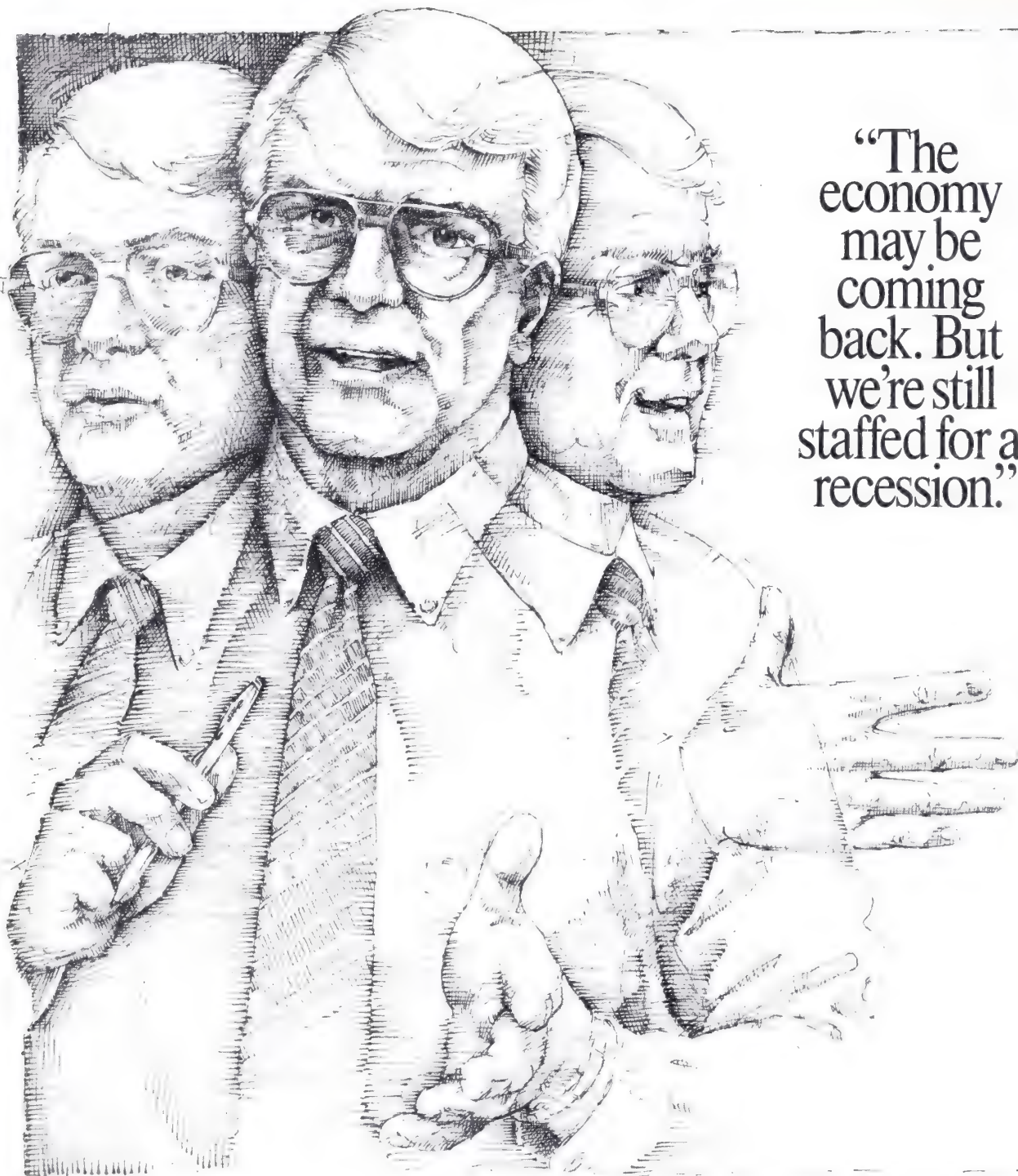
MACY'S MAY LAY OFF SOME SANTAS

► With the right judge, even bankruptcy hearings can be entertaining. At R. H. Macy's hearing on May 19, Judge Burton Lifland extended Macy's exclusive right to file a plan of reorganization until February, 1993. That was fine by Macy's, which says it can't write a reorganization plan until after Christmas. But an attorney for Macy's bondholders objected that "Macy's '92 Christmas season is no guarantee of how they'll do in '93 or '94." Lifland didn't seem too impressed by that line of argument. "They'll always have a Santa Claus," he said. St. Nick may miss a few appearances this year, though. The following day, Macy's said it is closing eight stores.





Destination No. 15: Berlin. Swissair. The civilized way to the world.®



“The economy may be coming back. But we’re still staffed for a recession.”

“Hiring more people may not be the answer.”

No one knows whether we’re on the verge of a major recovery—or a short-term comeback. But many companies will choose to gamble. In their rush to take advantage of rising short term demand, they’ll add long-term staff they don’t need—and incur expenses they simply can’t afford. There’s a more prudent way. With



Guy Millner
CEO

Norrell *flexible staffing*, you can quickly change the size of your workforce as demand changes. If you like, Norrell can even train and manage the workers for you. Just one example of how we’re helping companies find smarter ways to get things done. Find out how you can grow more efficiently. For a free staffing consultation, call your local Norrell office today.

Norrell®

Smarter Ways To Get Things Done.™

QUAYLE IS TAKING BUSH RIGHT— AND MAYBE RIGHT INTO TROUBLE

As George Bush casts about for an election-year life preserver, he is taking domestic policy inspiration from an unlikely quarter: the office of Vice-President Dan Quayle. The President's own staff is short on energy and ideas. That has made it easier for Quayle and his crew of fervent conservative intellectuals to fill the vacuum.

This may help Quayle build himself up as a 1996 Presidential contender. But the value of his counsel, which is pulling the President rightward while voters head the other way, is open to question. At a time when polls show the public wants more aid for cities, for example, Quayle is stepping up his assault on the dynamics of urban unrest.

Another case in point: Bush's decision to weaken environmental regulations. Repealing the Veep's Council on Competitiveness, Bush overruled Environmental Protection Agency Administrator William K. Reilly by granting a major exemption to the Clean Air Act. The action eases "permit rule" requirements to allow companies expanding plants or changing production processes to increase emissions without notifying the public.

IZZLEMENT. The move was met with almost universal catcalls from environmentalists and Democrats, and puzzlement from any Republicans. "It looks like the only understandable domestic policy they have over there is giving business and Wall Street what they want," says GOP analyst Kevin Phillips. "It won't wear well with the average person."

And the clean-air maneuver isn't the first time Quayle's agenda has been embraced by a President who seems desperate to cobble together a domestic policy. On a trip to riot-torn Los Angeles, he baffled listeners by repeating Quayle's attacks on costly, excessive litigation. In Kalamazoo, Mich., at an artificial-limb factory, he borrowed from Quayle's playbook, talking about "guys coaching Little League afraid to coach

because of a lawsuit being filed against them." Mused one plant manager: "Where did that come from?"

The Quaylites will keep up the pressure. They've convinced Bush that easing regulation lets him reach two key goals. By lowering business' costs, he can buy some insurance for a fragile recovery. And he can demonstrate his conservative credentials to a disaffected GOP right.



THE VEEP: A HARD LINE ON URBAN UNREST

THINK TANK. Quayle has been steadily improving his entrée at the White House. He's a golfing buddy of Chief of Staff Samuel K. Skinner. And thanks to Skinner, Budget Director Richard G. Darman no longer controls all domestic policy. Meanwhile, Quayle's shop, headed by staff chief William Kristol, is giving the Vice-President a prominence he couldn't win on his own. "Quayle wouldn't know a permit rule from a three iron," sneers a highly placed Administration official.

Independent Ross Perot is also helping Quayle. Bush aides worry about Perot's appeal to small business and the suburbs, and strategists think a probusiness

stance will win back wavering supporters. "We're happy to work with Dan Quayle to remind Republicans what we stand for," says Will Feltus, Bush's deputy campaign manager.

The main thrust of Quayle's advice to his boss is to return to the conservative platform he ran on four years ago. That means a revived campaign to cut capital-gains taxes and stepped-up confrontation with congressional Democrats. The trouble is that a swing right at this point will only remind voters of how far Bush has strayed. And even business is viewing the "new" Bush with a wary eye. "What entrepreneurs and businesspeople want most from George Bush isn't red meat," says John Endean of the American Business Conference. "It's consistency."

By Douglas Harbrecht and Richard S. Dunham, with Peter Hong

CAPITAL WRAPUP

INDEPENDENTS

Although a number of top Republican consultants have declined offers to join Ross Perot's undeclared Presidential campaign, the Texan is still talking with one big GOP name—Edward Rollins. There's no love lost between Rollins and President Bush. The GOP operative worked for rival Jack F. Kemp in the 1988 Presidential campaign. And in 1990, Rollins, then head of the GOP's congressional campaign committee, urged GOP House candidates to run against Bush's budget deal with Congress. One source says Perot has been "dangling millions of dollars under his nose." So far, Rollins

has resisted. He doesn't want to burn his bridges to the GOP. And his wife, former ABC executive Sherrie Rollins, heads the White House Office of Public Liaison.

DISABILITY

The recession seems to have made Americans sick in record numbers, causing serious problems for the Social Security Administration. Since 1989, applications for federal disability benefits have shot up 43%. Benefit claims always rise in slumps because sick or injured workers who might soldier on if jobs were available opt for disability. New regulations issued last year made it easier to qualify, too. And Social Se-

curity Commissioner Gwendolyn S. King chalks up part of the increase to an outreach program designed to find eligible recipients who had failed to apply. Trouble is, the sharp rise in claims is draining the disability insurance trust fund at an alarming rate. New projections show that the fund, which has also been hurt by a decline in payroll tax receipts, could run dry by 1997. Meanwhile, Social Security offices are reeling under the caseload—the processing backlog for new disability claims is up to seven months. Congress may appropriate extra money to help Social Security cope and may also authorize a transfer of money from the main retirement trust fund.



Telekom's high-speed communication:

already being where others would like to be.

Business and science are taking their race for the future

more and more also to communication paths. One key factor is an ever faster and more intelligent exchange of information. Remote, decentralized know-how and creative potential have to be used to an ever increasing extent.

To link decentralized company units closer together, to connect workstations to remote high-performance computers or databases or, in the near future, to hold video conferences even over PCs. This progress is based on new high-tech networks provided by Telekom – such as the Metropolitan Area Network. It will open up completely new facilities of low-cost high-speed com-



munication. The Metropolitan Area Network can be used to transmit large amounts of information particularly cost-effectively, safely and fast. It is an excellent means to interconnect private,

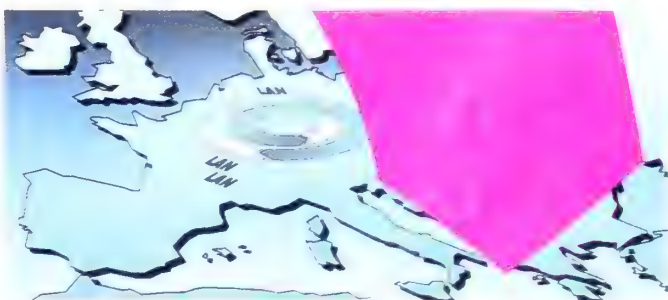
house communication networks, the LANs (Local Area Networks) – to other LANs, to computing centres, data bases and external workstations on a national and international basis. This new technology gives Telekom a leading role in Europe. It will provide new opportunities to gain a competitive edge.

ommunication Networks made in Germany.

Koblenz

International Key Account Management

	Tel. +49 261 1 23 11 ..	Fax: +49 261 3 82 82
New York, N.Y.:	Tel. +1 212 541-39 50	Fax: +1 212 541-38 99
Chicago, IL:	Tel. +1 312 214-32 14	Fax: +1 312 214-32 15
San Francisco, CA:	Tel. +1 415 955-05 12	Fax: +1 415 955-05 13
Tokyo:	Tel. +81 3 5275-63 75	Fax: +81 3 5275-63 76
London:	Tel. +44 71 287 17 11	Fax: +44 71 287 50 99
Paris:	Tel. +33 1 4070-00 50	Fax: +33 1 4070-16 51
Bruxelles:	Tel. +32 2 735-65 66 ..	Fax: +32 2 735-77 39



We tie markets together



Telekom

EUROPE'S 'STEADY CREEP OUT OF THE DOLDRUMS'

Bourses are setting records and profits are up in key industries, but growth will be modest

When Daimler Benz Chief Executive Edzard Reuter announced company results to a recession-weary crowd on May 19, he was downright jolly. "The dry spell has come to an end, just as we said it would," he reported. "This means that earnings prospects at Daimler Benz are clearly on the upswing." Indeed they are: Profits at Germany's biggest industrial company spurted 14% in this year's first quarter on a 16% jump in sales.

Call it the quiet recovery. From Amsterdam to London to Zurich, some signs of an economic comeback are sprouting. Corporate profits are providing happy surprises in such key industries as autos. And in the steel and high-tech sectors, where growth will likely remain meager, there is at least the sense that the worst is over. "What we're talking about is a steady creep out of the doldrums," says Deutsche Bank chief economist Norbert Walter.

But stock markets, a leading indicator, tell a more upbeat story. They're betting on a solid recovery, despite still mixed economic signals. London hit a record high in mid-May, Frankfurt is at its highest level in 20 months, and Paris recently touched a two-year high. And even Deutsche's Walter concedes that the European economy now has the potential to grow midterm at a respectable clip without much inflation. That's because Europe's two years of painful corporate restructuring are starting to pay off.

EASTERN EXPANSION. Take Daimler. The company took write-offs last year that reflect a major reshaping: \$635 million close-down costs for getting subsidiary AEG out of the typewriter and communications-systems business. As a result, Daimler's profits last year rose a modest \$90 million, to \$1.2 billion on sales of \$58 billion. But Daimler is confident margins will be a lot fatter this year. Indeed, Reuter is bragging that group operating profits—an internal number that's never disclosed—will more than double.

Consumer spending may be bouncing back, too. In the first quarter, profits at

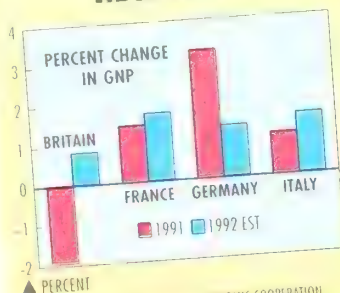
French auto maker Renault increased nearly eightfold, to \$440 million, on a 19% increase in sales. That's spilling over into other auto-related areas. In Italy, Marco Tronchetti Provera, who recently took over as CEO at tire and cable manufacturer Pirelli, sees the beginnings of an improved market. His company has broken even during the first four months of this year after consolidated losses of \$500 million in 1991. And in Britain, J. Sainsbury PLC, a supermarket chain, reported a robust 21% jump in first-quarter earnings.

Europe is also

year. Public-communications systems, power generating, and medical technology activities all showed strong sales gains. Even so, Chief Executive Karlheinz Kaske cautions: "We have had significant overall growth rates, [but] we have also been affected by the weakening of the global economy."

It's clear that this European recovery will be slower than previous ones. At best, it looks like 1.5% or so growth in the first year. One reason is that the competitive pressures of European inte-

EUROPE'S SPOTTY RECOVERY



DESPITE FRANCE'S 9.9% UNEMPLOYMENT RATE, THE PARIS STOCK MARKET IS BOARING AHEAD

benefiting from a strengthening U.S. economy that is sucking in imports. Exports of fiberglass and other building materials to the U.S. are up at France's Saint-Gobain. And at German drugmaker Bayer Group, U.S. sales are also rising. "We have reached the bottom of the valley," says CEO Hermann J. Strenger.

Germany's massive spending effort to rebuild the east is adding to corporate order books. Booming sales to the east helped lift profits at electronics giant Siemens by 8% in its fiscal first half. It's forecasting a 10% sales gain in the full

year. Public-communications systems, power generating, and medical technology activities all showed strong sales gains. Even so, Chief Executive Karlheinz Kaske cautions: "We have had significant overall growth rates, [but] we have also been affected by the weakening of the global economy."

Germany's Bundesbank also threatens to spoil the party with tough monetary policy. The bank is likely to stay its course after recent strikes resulted in pay hikes greater than the inflation rate.



and, paradoxically, Europe's nascent upturn is giving the bank ammunition to keep money tight. "The question is why ease up at all on rates now that the worry about creating a recession is very small," says Richard Reid, head of research for Union Bank of Switzerland, in Frankfurt.

LUMPER POUND. That kind of talk sends shivers through both Britain and France, where politicians are struggling to parlay the upturn into a genuine recovery. In mid-May, Britain's Conservatives piggybacked their election victory and a stronger pound into a 0.5% interest-rate cut, to 10%. The British are seeing suggestions of a pickup in auto sales and industrial production for the first time in two years.

In France, ruling Socialists are desperate to tame 9.9% unemployment and salvage their hopes in next year's elections. France recently moved to cut bank reserve requirements, permitting them to lower base lending rates and injecting some \$6 billion into the economy. And as the Paris market roars ahead, the government is selling off a 9% stake in state oil producer Total to raise \$1.85 billion to pay for new unemployment programs.



Europe's patchy recovery will no doubt force governments to find other creative ways to sustain growth. But they don't have much maneuvering room this time. In signing on to economic union, EC governments agreed to slash debt and deficits to create a stable, anti-inflation environment across the Continent. That task will be a lot easier if the early signs of recovery turn into a full-blown upswing.

By Bill Javetski in Paris and John Templeman in Stuttgart, with Richard A. Felcher in London

BRAZIL

FAMILIES FEUD AT BUNGE & BORN

A coup brings a new leader, vowing to untangle management

In Latin America's harsh new competitive climate, deep pockets and old family ties don't seem to cut it anymore. Nowhere is that message coming across more clearly than at the continent's biggest conglomerate, São Paulo-based Bunge & Born. Controlled by three shareholding families, the secretive, globe-trotting company has sales of \$14 billion, from food to computers. But recession and rising competition at home have dunked key operations in red ink and exposed glaring gaps in the group's loose, overlapping management.

The startling result: a palace coup. A group of family insiders, led by Octavio Caraballo, who oversees Bunge & Born's \$1.5 billion Argentine businesses, has taken charge. Caraballo is from the Hirsch family, which inherited shares from an early partner in the business. Now he heads Bunge & Born's key family-run steering committee, replacing ousted Jorge Born III, 57.

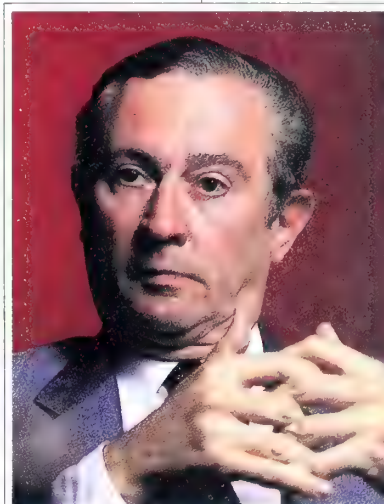
FAILED FORAY. In mid-May, after months of stonewalling, the company confirmed rumors of the boardroom revolt, which actually happened last year. And in a first-ever report on consolidated Brazilian operations, it revealed the coup's bottom-line motive: losses in Brazil totaling \$61 million in 1990 and \$93 million in 1991. Dissension among family shareholders was also stirred by Jorge Born's failed 1989 foray into Argentina's public affairs. Born collaborated with newly elected President Carlos Menem to pick two successive Bunge & Born executives as economy minister. But one died six days into the job, and the second was forced out by a surge of hyperinflation.

Caraballo, 48, aims to modernize and restructure, starting with the collection of Bunge & Born companies in Brazil and Argentina, where the group was founded in 1884. To map changes, he brought in consultants McKinsey & Co.

Caraballo clearly wants more professional management, free of family rivalries. Jorge Born has been moved to the

post of honorary president, while an outsider is replacing younger brother Juan C. Born, 56, as country manager, or overseer, of the group's 75 Brazilian businesses. His expected successor: Ludwig Schmitt Raden, former president of the Brazilian subsidiary of Germany's Degussa. The objective is to bring in someone "with a fresh mind, open to [solving] problems, distant from any internal dispute," says group spokesman Armando Coelho Borges Filho.

The group's main troubles stem from its awkward structure. Although Bunge & Born is a major player from Australia to the U.S. to Europe, it doesn't have the typical multinational's neat pyramid of subsidiaries controlled by a parent company. Instead, family shareholders hold stock in each of many affiliates, with a steering committee



JORGE BORN III: NOW A FIGUREHEAD

loosely in charge.

To sort out the management tangle, 20 young Bunge & Born executives trained by McKinsey have been visiting Brazilian affiliates to explore ideas for change. Expansion hasn't halted, however: Last month, the group's Moinho Fluminense bought Hershey Foods Corp.'s 41% share of Brazilian foods processor Petybon for \$7.5 million. And Borges Filho says Brazilian operations will show a profit for the year, helped by a record harvest and heavy food exports.

In Argentina, critics say Bunge & Born has missed good buys in Menem's privatization spree. But now, to tap the expanding local capital market, three affiliates are planning to sell stock to the public for the first time. Three others are already publicly traded. The moves will help Bunge & Born to "keep growing and grasp opportunities," says Martín Blaquier, the group's capital markets director. Caraballo will need those fresh funds and then some if he's to reshape Bunge & Born to meet the tough new competition on its home ground.

By Geri Smith in Rio de Janeiro and John Pearson in New York

Commentary/by Robert J. Dowling and Gail E. Schares

LESSONS FROM PRAGUE'S FULL-TILT RUSH TO CAPITALISM

Emil Mladek, formerly of Longboat Key, Fla., now of Prague, peers out of his communist-built apartment into the gray mist. It's May Day, a national holiday, and the retired Chicago commodities broker is recalling his emotional journey home to help the new Czechoslovakian government. At age 72, he has been thrust to the center of one of the great economic experiments of the decade. "When President [Václav] Havel called on us to come back, I never thought I would do something so important," he says.

Mladek is a principal in a scheme to make half the population "instant capitalists." It started on May 18, when 8.6 million Czechs began turning in coupons for shares, first for 10% of the state's industry, eventually for half of it. Mladek directs the second-largest of more than 400 private mutual funds that have sprung up to manage the investments.

Imagine what it would have been like if the U.S. government had offered every taxpayer the chance to buy a voucher for the \$200 billion in busted real estate it got from the savings and loan collapse instead of selling the properties at auction. That solution was never considered in the U.S. But in Eastern Europe, where ownership debates have raged since communism collapsed in 1989, finding a fair way to sell off state property and shut down bankrupt factories is critical. Wary of doing this dirty work themselves, politicians are now throwing the choice to voters.

MORE STABLE? That's politically expedient, but is privatization by plebiscite good economics? The answer may be yes. Compared to the fire sales of telephone companies, airlines, and banks in South America to wealthy Latinos and foreign investors, it's slow and brings in no new money. But for countries with developing markets and no real capitalist structure, it's an important

leap. If the voucher system fosters a broad-based people's capitalism among educated Eastern Europeans, it may create a more attractive place for investors than the quick-fix Latin deals.

Mass privatization also puts to rest the debate about finding a gentler "third way" between capitalism and socialism. Today, most Eastern Europeans want Western-style markets—the sooner, the better. In Czechoslovakia and Hungary, the personal savings rate has soared to around 12%, and a budding middle class is buying homes and family businesses. Private ownership of small business in Czechoslovakia has soared from zero to 10% in two years, and it's 40% or more in Poland

in markets. Many will lose the \$37—about a week's pay—they spent for their scrip. Some will feel they sold their vouchers to mutual funds for too little. Others will get rich. The privatization will also be a national referendum on which companies will live or die: Businesses that fail to eventually attract new investors, either Czech or foreign, must close.

ENDLESS DEBATE. It's an experiment for Czechoslovakia's neighbors, too. In Poland, where the fate of state companies is mired in a debate among 29 political parties, the two best choices are to name a privatization czar or to use a mass-voucher scheme. Although the Hungarians have rejected the coupon

system in favor of using 80 Western investment bankers to sell 2,500 companies, they, too, will weigh the Czech results.

What's most important for these governments is to maintain the momentum, says Karel Dyba, the Czech economic development minister. When Polish Finance Minister Leszek Balcerowicz showed how to free prices with "shock therapy," the Czechs quietly followed. Now, Czech Finance Minister Václav Klaus has staked his career—and campaign for Prime Minister—



CAFE KLATCH: CZECHS BONE UP ON THE BUSINESS NEWS IN A PRAGUE RESTAURANT

and Hungary. Western cars, washing machines, and loose-fitting jeans denote the new lifestyle.

Across Eastern Europe resistance to selling off state industry is fading. With subsidies shrinking, even the former communists left at the state factories are resigned to privatization. But they want to do it gradually, while the voters want to accelerate reform. So, eager technocrats, with a clean slate to draw on, are floating some of the most radical economic ideas in the world.

Take the Czech scheme. Anyone with a voucher becomes a shareholder of a newly privatized business. Shares of up to 2,000 companies will eventually be traded, making it a mass education

on the Big Bang. Although his plan worked, Balcerowicz was fired. Klaus's appeal is deeper: His scheme could be a model for Russia and the Baltics.

Selling industry has turned out to be much harder than freeing prices. Then, after everything's sold off, newly privatized factories and lumber mills will have to find ways to survive. Should they serve as low-cost producers for German and other European companies? Or should governments encourage them to specialize so they can compete in Europe and the global economy? Not long ago, such questions seemed light-years away. Today, you can bet someone in Prague, Budapest, or Warsaw is on the case.

DO A MILLION PEOPLE COUNT ON YOU?



Then you know what it's like to be a Canon personal copier. That's because for years, over a million customers have relied on Canon for crisp, clean copies.



PC MINI-CARTRIDGE

They've also come to trust their personal copiers because they're virtually maintenance free, since everything that could run out or wear out, the toner, drum and developer unit, is in our exclusive single cartridge.

So if you're looking for the brand that's been #1 nine straight years and sold over a million, call 1-800-4321-HOP.

PC-1 PERSONAL COPIER



We'll tell you about our full line of personal copiers, from basic to feature-packed models. After all, a lot of people are counting on you, too.



The Clean Earth Campaign

Canon

Financing available through Canon Financial Services. See your Canon dealer for details. © 1992 Canon USA, Inc.

1992 Canon USA, Inc. Home Office Products Division One Canon Plaza, Lake Success, NY 11042

Canon

ONE THING HASN'T CHANGED IN MORE THAN 50 YEARS.



**LIBERTY MUTUAL LEADER
IN WORKERS COMPENSATION
SINCE 1936.**

It's a leadership position we've earned by:

REDUCING COSTS THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is conducting important research on workplace conditions. Our national network of 750 local loss prevention specialists applies that knowledge on site to help customers reduce loss.

CONTAINING COSTS THROUGH CLAIMS MANAGEMENT

Liberty has always been the leader in managed care. Today, LibertyPREFERRED CARE™—our national PPO network—provides quality, cost-effective care for injured workers. In 1991 alone, our medical cost containment programs saved our customers \$170 million. And, we've taken effective and innovative approaches,

such as Special Investigation Units, to control the cost of fraud.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As a leader, we recognize the need for change. We've developed new products, such as our large deductible policy and Helmsman Service plan, as alternatives to traditional workers compensation insurance. We are also actively working both nationally and at the state level for workers compensation reform.

PARTNERING THROUGH DIRECT WRITING

As a direct writer, we are able to work closer with our customers. This relationship builds a partnership to control costs.

And that's what makes us a leader.

**LIBERTY
MUTUAL.**



FACING THE ISSUES THAT FACE OUR CUSTOMERS

WILL THAILAND'S 'TIANANMEN' DERAIL THE GO-GO ECONOMY?

Before Thailand's demonstrations turned nasty on May 17, analysts had jokingly dubbed them Asia's first yuppie revolt. Thousands of Bangkok's newly affluent—any even carrying mobile phones—were among the throngs at gathered daily for peaceful demonstrations starting on May 4. But two weeks later, after three days of the worst violence in 20 years, no one in “the land of smiles” is joking. Bangkok's smoldering government district looks like a mixture of the aftermath of Beijing's Tiananmen Square massacre and the Los Angeles riots. Streets are littered with charred hulks of fire trucks and smeared with the blood of dead and injured protesters.

Although the protests died down on May 20 at the urging of King Bhumibol Adulyadej, they will leave deep scars. Already there are signs of splits in the military. Several powerful generals have echoed the demonstrators' calls for the ouster of strongman General Suchinda Kraprayoon. And the massive participation of professional and middle-class Thais in the disturbances signals that they will no longer accept military rule quietly. “I think this is a revolution,” said Amaraporn Thammakasil, a 30-year-old Sony Corp. supervisor, as he watched a massive demonstration at Ramkhamhaeng University on May 19. “This has been building for a long time. We pay taxes, and the government uses them against us.”

OUR EXODUS. Meanwhile, what has been one of the world's hottest economies, growing at an annual average of more than 8% over the past decade, has received a severe jolt. Investors who thought Thailand's political development had kept pace with its economic advance are in deep shock. On May 17, stock prices plunged almost 10%—the maximum allowed in one day—before trading was halted. Hotels and airlines serving the travel industry report massive cancellations—threatening some \$5 billion in annual revenues. Foreign bankers in Bangkok predict a sharp falloff in new projects, as the Japanese and other investors who have bankrolled the Thai economy since 1985 shift to safer climes—such as Malaysia and Indonesia. “This is a major setback for investment that will linger beyond this year,” says Miron Mushkat, chief Asian economist at Baring Securities (Hong Kong) Ltd.

While the government in Tokyo has kept quiet, Japanese companies are bound to get jittery. Japan's investment in Thailand had already been slowing because of the country's tangled phone lines, traffic jams, and shortage of skilled workers, which have driven wages up. But political stability, at least, had not been a big concern. Now, “investors are going to start reevaluating the investment climate in Thailand just as they did after Tiananmen,” said C. H. Kwan, a senior economist at Japan's Nomura Research Institute. “Japanese investors want to diversify to frontier markets like Vietnam. This will accelerate the process.”

In hindsight, it's clear the crisis has been brewing for some time. Thailand's well-to-do classes have mushroomed lately—

and have grown discontented with corruption, inefficiency, and other drawbacks of military regimes. The army, however, views itself as the only institution with the efficiency and moral fiber to run the government—even though the system has, in fact, become flagrantly corrupt. Many of Thailand's frequent military coups, rather than being inspired by high ideals, have been power plays for access to kickbacks. Foreign investors complain that they routinely have to factor in an additional 5% to 6% for “commissions” on big projects.

HOOGLIGAN TAUNTS. The seeds of the current turmoil were sown when Suchinda reneged on his promise to return Thailand to democracy, after toppling the elected government of former General Chatichai Choonhavan in February, 1991. Instead, his junta imposed a constitution that allowed Suchinda to install himself as Prime Minister. He further inflamed sentiment by bringing into his Cabinet certain politicians suspected of amassing huge ill-gotten fortunes under Chatichai. That move prompted a hunger strike on May 4 by Chamlong Srimuang, the charismatic governor of Bangkok—sparking demonstrations that have brought as many as 200,000 protesters into the streets. Rather than dispersing as usual at the first sign of armed soldiers, the crowds stood up to the military—despite heavy casualties and the arrest of 3,000 people, including many of the opposition leaders.

The military crackdown has been particularly brutal. Provoked by hooligans, who stormed through government buildings and tried plowing through barricades in commandeered buses, the soldiers shot fleeing demonstrators in the back and beat many more, before hauling them away. Estimates of the dead and wounded vary widely, but certainly such violence has not been seen in Thailand since 1973, when hundreds disappeared without a trace.

Reaction from Thailand's chief international backer, the U.S., has been muted so far. To protest the political violence, the U.S.

suspended joint maneuvers with the Thai military that were to take place in a few days. American troops, however, will still perform so-called humanitarian activities, such as building bridges and schools, that were part of the exercise. Already, \$60 million in U.S. aid had been cut off in response to the 1991 coup.

On May 20 the king—whose role is largely ceremonial—appeared on television with Suchinda and opposition leader Chamlong and urged them to work together to end the crisis. But the general's position now looks very tenuous. If he does not agree to step down, the protests might flare up again, and his fellow officers might be tempted to topple him. But whatever the short-term outcome, the Thai political game is unlikely ever to be the same again. The generals, who have dominated politics with coups and countercoups for some six decades, no longer have the field to themselves.

By Pete Engardio and Ken Stier in Bangkok, with Ted Holden in Tokyo



FLAG-WAVING: A “REVOLUTION”?

TWO NORTHERN BIRDS ON THE ENDANGERED LIST

Air Canada and Canadian may have to link up with U.S. rivals

As symbols of pride, airlines for some countries rank right up there with sports teams, beer, and the national cuisine. Such is the case in Canada, where more than a quarter of the recession-wracked populace would support a government bailout of the country's two global carriers, according to a recent Gallup poll. A mere 9% felt that the airlines, Air Canada and Canadian Airlines International Ltd., should merge with powerful U.S. carriers.

Alas, alliances with U.S. competitors may be the fate of Canada's carriers. Canada's airlines suffered record losses last year, and they have weak balance sheets. Both face growing competition from more powerful U.S. airlines. And with the industry increasingly dominated by megacarriers, even most Canadians concede that their two relatively small airlines can't survive much longer in their current form.

TOOTH AND NAIL. Canadian Airlines, the smaller of the two, is in talks with AMR Corp.'s American Airlines Inc. about a sweeping alliance. Air Canada is fighting tooth and nail to block that. Ironically, the man leading the charge is an American: Hollis L. Harris, a former executive at Continental Airlines and Delta Air Lines Inc. Since becoming Air Canada's CEO in February, the Southerner has wrapped himself in the Canadian

flag. If Canadian hooks up with American, Air Canada may have no choice but to seek a similar link with a U.S. carrier, says Harris. And he warns that as U.S. carriers gained control of these alliances, Canada's airlines could be reduced to mere feeder status.

Harris has instead championed a "made in Canada" solution in which Air

Air Canada stunned analysts with a \$136 million loss. Both airlines have made valiant efforts to succeed by paring staff and improving service. But many problems are beyond their control. In Canada, taxes raise fuel costs 30%, and higher interest rates raise the costs of buying aircraft. Plus, Canada's market of 27 million people simply does not provide a big enough base to feed passengers to international routes. "We've done everything we can to make Canadian lean and efficient," complains Eyton, "but our costs are still 15% higher" than U.S. carriers'. Air Canada's are higher still, and domestic overcapacity of 20% to 30% has led to damaging price wars.

The view on the horizon is not necessarily much brighter. Canada and the U.S. are deep in negotiations to liberalize the archaic rules restricting flights

between the two countries. With 13 million passengers a year, the U.S.-to-Canada market is the largest between the U.S. and any country. But the agreement allows direct service among only eight Canadian and 25 U.S. cities, leaving many routes unserved. There are no direct flights between Ottawa and Washington, D.C., for example.

Both countries are eager to give their citizens greater access to each others' cities and to satisfy demand, especially from business travelers. The problem is, the new treaty will make it easier for U.S. carriers to lure Canadian passengers across the border—and then fly them to international destinations. Canada complains that U.S. carriers already reap two-thirds of the \$1.5 billion in annual scheduled flights between the two nations. If this isn't rectified, says Harris, a new agreement "will jeopardize the viability of Canada's airline industry."

So Canada is pushing for a transition



EYTON, CEO OF CANADIAN AIRLINES, AND AIR CANADA CEO HARRIS

Canada would swallow Canadian and emerge as Canada's surviving global player. But Rhys Eyton, CEO of Canadian Airlines and its parent, PWA Corp., says a merger would bring many layoffs without solving fundamental problems.

The immediate crisis is financial. The two carriers lost a combined \$315 million on revenues of \$5.4 billion last year. By contrast, AMR lost \$240 million on \$12.9 billion. In the first quarter, Canadian dropped an additional \$61 million, while

CANADA'S BELEAGUERED AIRLINES

HISTORY

Amalgamation of five smaller airlines, emerged following deregulation of Canadian aviation in 1984

Canada's traditional flag carrier, created in 1937 and privatized in 1989

MAJOR ROUTES

Pacific, Latin America, Europe, and Canada

U.S., Caribbean, Europe, and Canada

FINANCIAL PROFILE

1991 revenues: \$2.4 billion
1991 loss: \$134 million

1991 revenues: \$3 billion
1991 loss: \$181 million

DATA: COMPANY REPORTS, BW

It's a Technical Knockout.



The tale of the tape says it all. Weighing in with 210 horsepower, the 24-valve Twin Dual Cam V6 GTP delivers the knockout punch in seconds. One look at its imposing body shows you why. It's pumped to the max and holds its ground with the help of a rally-tuned sport suspension. It moves on aluminum alloy wheels and 16" high-performance Goodyear Eagle GT+4 tires. And it stops with computer-controlled anti-lock brakes. The new Pontiac® Grand Prix™ GTP. Technically speaking, it's pure excitement in motion.

Pontiac Grand Prix GTP. A New Kind of Excitement.



PONTIAC CARES with an extensive 3-year/36,000-mile no-deductible warranty (see your dealer for terms of this limited warranty) plus 24-hour Roadside Assistance. Call toll-free 1-800-762-4900 for more product information and dealer locations.  BUCKLE UP, AMERICA! © 1992 GM CORP. ALL RIGHTS RESERVED.

TRM MAKES MILLIONS —A NICKEL AT A TIME

Its cut-rate, in-store copying has small retailers signing up in droves

won't wait. The first choice for Canadian carriers is to buy the U.S. company outright, says Harris. "If we can't get a deal, we'll have to go to court."

gain more Canadian passengers, a rich contract to provide administrative services to Canadian, and access to its Pan-Atlantic routes.

WHO'S IN CHARGE? Canadian and American hope to have a deal by early summer. It must then be approved by Canada's National Transportation Agency, which is concerned that control of Cana-

But in a recent interview with Toronto's *Globe and Mail*, Air Canada's Harris said: "I know him.... If [Crandall] is into an arrangement—5, 10, 15, or whatever—he is going to be in control."

to approve the deal, in part because it wants to preserve domestic competition within Canada. For Canadian, the bigger danger is that the talks could falter.

Right now, Air Canada appears the more likely to walk away.

three-pronged strategy. He's trying to block the proposed Canadian-American linkup. And he's stepping up efforts to tie Air Canada into strategic alliances with other carriers. Harris has been

ers in Europe and Japan. To bolster Air Canada's attractiveness, Harris is pres-

fly to Tokyo. And on Apr. 30, he un-

is powerful enough to match the stout American will give Canadian. Ultimately, some say, Air Canada will be forced to link with United Airlines or Delta—a suggestion Air Canada resists, for fear it might lose its independence.

For now, they will keep operating. But over time, predicts York University economist Fred Lutz, both may end up in similar roles, as "commuter carriers" to big U.S. airlines. That may shock some Canadian nationalists. But in the airline industry of the future, it may be their carriers' best hope of survival.



CHAN: HIGH VOLUME, AUTOMATED BILLING, AND REBUILT COPIERS HELP KEEP COSTS LOW

Parazv. In 1984, at 52, he was managing more than 50 branches of Copeland Lumber Yards Inc. But he had no equity and little room for advancement. So Chan ended his 27-year career to take over a struggling business that ran about 100 copy machines in small Oregon stores. For Chan, who received equity—but no salary—for the first six months, the transition was a shock: "I had been managing a \$100 million business, and now I had to make money a nickel at a time," he recalls.

This year, his TRM Copy Centers Corp. should earn more than 50 million nickels, or more than \$2.5 million, on revenues of \$30 million. Portland-based TRM now has 14,000 copiers in 34 cities in the U.S. and Canada. After it went public last November, raising \$13.7 million, its stock shot from 5½ to 16. It now trades at around 14½, 31 times expected earnings.

The concept is unlikely: Small retailers pay TRM \$95 to install a used, refurbished copy machine in their stores. Customers make their own copies at 5¢ each. TRM provides repairs and supplies and collects a percentage of sales. On average, the retailers keep 24% of the proceeds and benefit from increased traffic.

NOT SO SIMPLE. CEO Chan, who immigrated from Canton, China, at 15, brought sophisticated operating systems to TRM. He automated billing and started rebuilding copiers in-house. By 1988, he had turned the company around and

was able to buy copiers, parts, and toner at lower prices today than it did in 1984. It centralizes billing, collects payments, and uses a computer to track inventory. So repair costs are kept low.

Chan's strategy works at small stores, which can't match such economies, and coin-operated machines, which are more expensive to maintain. But it's not all smooth sailing. "It's a tough business," says Seattle investor Frederick O. Panisell, who is its chairman and largest stockholder.

TRM is No. 74 on BUSINESS WEEK's 1992 list of Hot Growth companies, and Chan is targeting 50 additional U.S. cities for still more growth. He estimates the total U.S. market at more than 40,000 copiers. TRM is also experimenting with color copiers, charging 39¢ a copy. That's risky, because new color copiers are costly, and used units are still rare. He also plans to put copiers in London.

Of the three founders—whose first names begin with T, R, and M—only one remains with the company. Matthew J. Shawcross, 29, was 19 when he and his friends stumbled across the 5¢ copy idea as a way of using surplus trade-in machines from their dealership. His TRM stock is now worth nearly \$3 million. Chan's holdings are worth \$8.3 million. No doubt about it: Leaving the lumberyard was the right move.

WINDOWS™

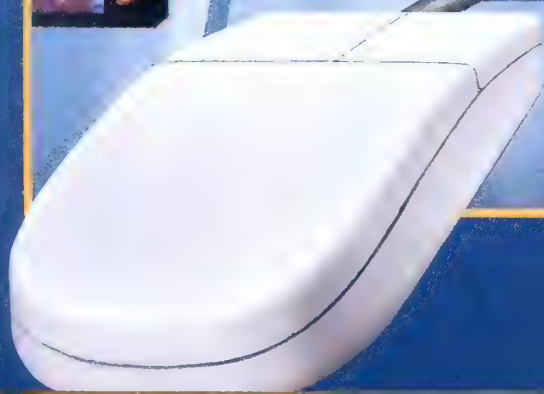
TO

EVERYTHING

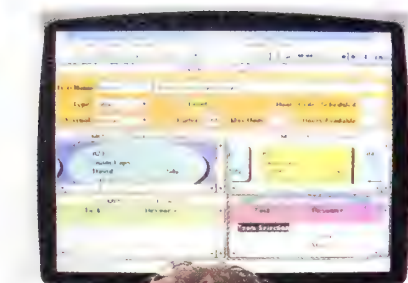
BY RON BOONORE

A SIMPLE GUIDE
TO WINDOWS-BASED
SOFTWARE

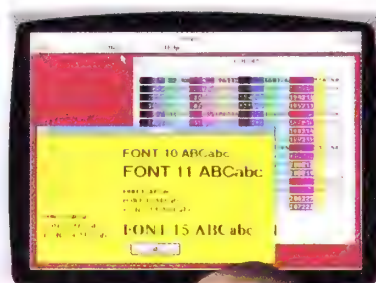
You've seen the signs everywhere, from your daily newspaper to cable's Weather Channel: Microsoft Corporation is "Making It Easier" with its megahit software, Windows 3.1. There are currently more than 10 million Windows users, a skyrocketing number that challenges the nation's leading personal computer programs.



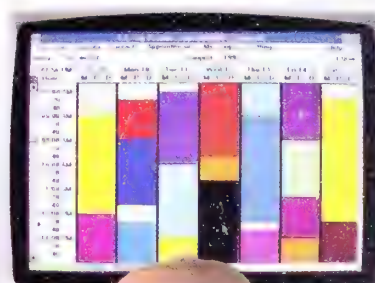
Anyone Can Open Our Windows.



Future Project Manager



Future Database Consultant



Future Executive

It's that easy.

Introducing the friendliest, easiest, biggest family of Windows software you'll ever meet.

The CA Family of Windows software.

Covering virtually every category from accounting to database to word processing to graphics, CA Windows software sets the standard for ease of use.

If you can click a mouse, CA Windows software can help you work smarter, faster and more efficiently than you ever thought possible.

Underneath the simple, user-friendly interface lies some of the most advanced and powerful Windows technology in the industry.

Literally hundreds of dazzling push buttons, floating windows, pull-down menus, pop-up dialog boxes, colors, fonts and



graphics, all designed with two basic goals: Making your computer a lot friendlier — and your life a little easier.

Behind all of these wonderful Windows stands the world's leading software company, Computer Associates. With service and support that goes around the clock and around the world, CA is the software company that more than 95% of the Fortune 500 depend on.

So dial 1-800 CALL CAI right now to order a free Demo Disk that will show you just how easy it is.

It's the Windows software that anyone can open.

And we mean anyone.



CA SuperProject



Simply Accounting



CA-dB



CA Graph



Presents



COMPUTER ASSOCIATES
Software superior by design.

WHAT IS WINDOWS 3.1?

Microsoft Windows 3.1 is an operating system that sits on top of MS-DOS. Simply put, Windows gives you the ease of use and the familiarity of feel that used to be the province of Apple's Macintosh. Now the PC (as opposed to the Mac) has its own icons that free users from remembering all those letter-strings for DOS commands.

Commands in Windows are stored in pull-down menus which the user drags down from the top of the screen with a mouse. If you aren't sure what a command does, an index of "Help" files is only a mouse click away.

Most importantly of all is multi-tasking, which means that you can run several applications at the same time without closing one to get at the other.

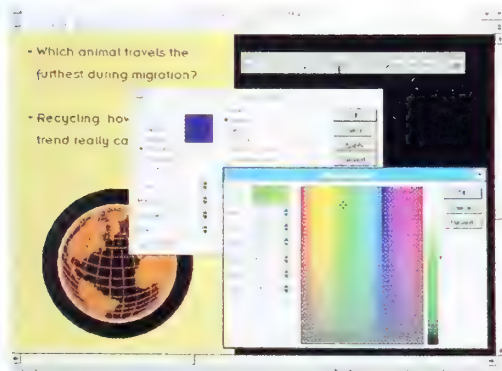
With 5,000 programs or applications available already, totalling \$1 billion in sales, the phenomenon known simply as Windows is proliferating at a pace unprecedented in the software industry. This is a guide through the maze of Windows applications for business.

JARGON AND WISH LISTS

For Windows, you'll have to learn new jargon: Whizzy Wig, Gooney, and O'Lay.

Whizzy Wig (WYSIWYG) stands for what you see is what you get. WYSIWYG means that what's on your computer screen is exactly

Run several applications simultaneously, with on-screen commands, help references, toolboxes, and customizable options, as here in Adobe Illustrator 4.0.



what will print out on your printer.

Gooney (GUI) stands for graphical user interface. Truly the heart of Windows, GUI standardizes your computer screen so that applications from different manufacturers look and operate the same: to get the computer to work you simply point at icons and click upon them with a mouse.

O'Lay (OLE) stands for object linking and embedding. OLE treats everything—data, text, drawings, and images—as objects, allowing users to move blocks from one application to another with ease. And because of embedding, changes made to one object will alter other existing files of the same object, automatically.

After you tackle this guide with your pencil to make out your Windows software wish list, take advantage of the opportunities manufacturers offer to examine their products. Go to trade shows and traveling software exhibits. Call or write to the manufacturers for product literature, and ask for a free demo disk, many of which contain working models, and play with the software at home.

WORD PROCESSING

WordPerfect for Windows marks the long-anticipated entry of the word processing giant into the Windows market. "The WYSIWIG display makes it easy to see and edit fonts and graphics on the screen," explains Alan C. Ashton, president of WordPerfect Corporation. All the old features of Version 5.1

PLUS ON WINDOWS

"Windows has let us go further in our strategy of...
...the...
...small business's..."

David Seuss,
Chairman and CEO,
Spinnaker Software, Inc.

"We're devoting most of our...
...the Windows environment...
...and your applications..."

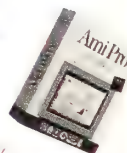
Charles B. Wang,
Chairman and CEO,
Computer Associates
International, Inc.

"...
...
...
..."

J. Paul Grayson,
Chairman and CEO,
Micrografix

"...
...
...
..."

Don Emery,
President and CEO,
Reference Software International





OS/2

*In Canada, call 1 800 465-1234. **Upgrade from Windows 3.11: upgrade from DOS: \$199. \$199 base operating system. These prices valid only when ordered directly through IBM. Proof of purchase required. Dealer prices may vary. Offer valid in U.S.A. only, expires 7/31/92. Helpware limited to U.S.A. only. IBM and OS/2 are registered trademarks and OS/2 Crash Protection and Helpware are trademarks of International Business Machines Corporation. All other prices are trademarks or registered trademarks of their respective companies. ©1992 IBM Corp.

A large field of IBM OS/2 2.0 computers, each with a monitor displaying a graphical user interface, arranged in rows on a grassy field. The sky is a vibrant pink color. In the foreground, a single computer is shown in more detail, with a bright light beam emanating from its screen.

Starting today, everything your computer has ever done, it will do better.

You've created documents, crunched numbers, even conquered alien invaders. Still, your software hasn't really been able to make the most of your hardware. But now it can.

Introducing OS/2® 2.0. It's a new way to take your computer programs beyond the limitations of the past—it lets you do more with them than you ever could with DOS or DOS with Windows®.

It's also a way to run more than one program at a time. Print a document and calculate a spreadsheet while you open files, for example. You can even "cut and paste" between *any* programs—drop text from WordPerfect® 5.1 into a Lotus® 1-2-3® for Windows spreadsheet—the possibilities are endless.

About the only thing better than how much more OS/2 lets you do, is how easily it lets you do it all. Friendly icons fill the screen—even installation is graphically guided. And OS/2 comes with HelpWare™: a range of services and support, including a toll-free number. But maybe the best part is that instead of buying DOS, Windows and Adobe Type Manager®, you get them all with OS/2.

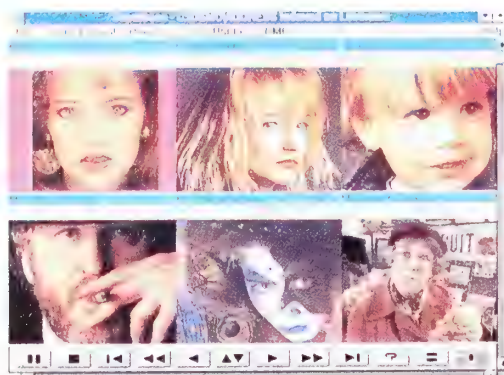
With OS/2, your software can catch up with your hardware. And you can do the only thing you haven't been able to do with your computer. Make the most of it. For an IBM authorized dealer near you, or to order OS/2 2.0—at special introductory prices of \$49 for Windows users and \$99 from any DOS—call 1 800 3-IBM-OS2.*



Introducing OS/2 2.0.

- Runs programs made for DOS, Windows and OS/2.
- Runs more than one program at a time so you don't waste time.
- Easy to install, learn and use. Has online help and tutorial.
- Makes the most of 386 SX hardware and above.
- OS/2 2.0 upgrade: \$49 from Windows, \$99 from any DOS.**

The IBM logo, consisting of the letters "IBM" in a stylized, blue, blocky font.



Handle information, once the domain of mainframes, with database management packages such as Superbase for Windows from Software Publishing Corporation.

are intact, but now the template is on the screen, features are fully customizable, and graphics and some desktop publishing capabilities are included.

The other two major word processors for Windows are Ami Pro for Windows from Lotus and Microsoft's Word for Windows, both in Version 2.0 with enhanced capabilities that users of earlier versions will find vastly improve both products.

SPREADSHEETS

Lotus 1-2-3 Release 1.1 for Windows from Lotus Development Corporation is the newest Windows version of the world's most popular spreadsheet and combines the innovative spreadsheet technologies that Lotus first introduced in 1-2-3 for Windows in 1991, such as SmartIcons, 3-D spreadsheets, and the Lotus Classic menu, with new performance enhancements. Users of DOS versions of 1-2-3 will find the Windows version easier to use, faster, and more intuitive in helping the user understand the meaning behind the data.

CA-Compete! from Computer Associates International is another popular package in the Windows spreadsheet category. In CA-Compete! a user can view financial parameters such as income and expenses over time, across different product lines, regions, forecast and budget schemes. Microsoft's spreadsheet, Excel 4.0, is integrally connected with Microsoft's other business products, allowing

fast interchange of data among all packages, while WingZ from Informix Software is known for its dazzling 3-D graphics.

DATABASES/ACCOUNTING

Once the domain of the mainframe, database management has moved to the desktop.

Superbase for Windows from Software Publishing Corporation is a relational programmable database management system which combines graphical ease-of-use with traditional database power for both processing data and building software applications. For the business user, Superbase for Windows offers intuitive, graphical (including multimedia) business solutions, along with the ability to query business data.

Ventura DataBase Publisher from Ventura Software, Inc. and dBFast from Computer Associates are other major entries in the database category of software.

Peachtree Accounting for Windows from Peachtree Software is a complete desktop accounting package, including general ledger, accounts receivable, invoicing, accounts payable, payroll, inventory, job costing, financial report writing, and more. Using Windows 3.1 OLE functionality, a user can cut a logo from a Windows paint program and paste it onto an invoice or check.

MANAGING—EVERYTHING

One of the jobs most suited to the PC is organization. In business, that means managing time, staff, clients, prospects, and projects.

On Time for Windows from Campbell Services, Inc. is a computer version of the pocket calendar most business people use—plus a lifetime calendar, appointment book, to-do list, desktop planner, and an alarm clock.

For managing your clients and prospects, Act! for Windows from Contact Software International keeps track of all your business relationships. The program lets you schedule, auto-dial, keep telephone logs, check activities lists, review prospect files, manage client files, and even includes a word processor and





Upgrade from DOS \$89

Full Product \$125

Upgrade from Windows

\$49

OUR OS/2 2.0 PRICES ARE VERY COMPETITIVE. OUR SERVICE? THERE'S NO COMPETITION.

At Corporate Software your money is well spent.

When you buy IBM® Operating System/2® version 2.0 you get the integrating platform. It gives you the flexibility of running DOS™, Microsoft® Windows™ and OS/2 applications simultaneously under a single operating system. And you get consistent, predictable performance when you do.

And when you buy OS/2 from Corporate Software you get more than just a good price. That's because no other reseller comes close to Corporate Software as a service provider. In addition to our standard evaluation and help desk services for more than 1,000 products, we offer special capabilities you can leverage for OS/2 from compatibility testing to migration planning.

Hey, it's a win-win situation: OS/2 flexibility, backed by our flexibility.



THE GENIUS OF FLEXIBILITY

(8 0 0) 6 7 7 - 4 0 0 0

Corporate Software Inc., 275 Dan Road, Canton MA 02021 Offer Expires 7/31/92.
IBM, Operating System/2, and OS/2 are registered trademarks of International Business Machines Corporation. Microsoft is a registered trademark and Windows is a trademark of Microsoft Corporation.



dynamic data exchange (DDE) macros to link with major Windows applications. Pop-up reminder notes will even interrupt other Windows applications.

For large corporate customer databases, a powerful contact management package called PFS:Prospect is available from Spinnaker. PFS:Prospect works with up to 32 million records per database and allows an unlimited number of client databases. Mail merge features and password security are also included.

Project management software lets you take control of your projects, reviewing their progress and problems continuously. Microsoft Project 3.0 for Windows lets you click your way to customizable Gantt, PERT, resource, and spreadsheet charts, graphs, and reports, with your choice of fonts, colors, and graphics. Other project management packages include CA-SuperProject for Windows from Computer Associates and On Target from Symantec.

"On Target makes project management accessible to the general business professional," says Gordon E. Eubanks, Jr., president and CEO of Symantec. A special feature of On Target is the Force To One Page, which allows the user to size the project automatically to fit on a single page. Symantec has also just introduced Time Line 1.0 for Windows, an advanced project management program for high-level and corporate project planning.

Polaris PackRat from Polaris Software is

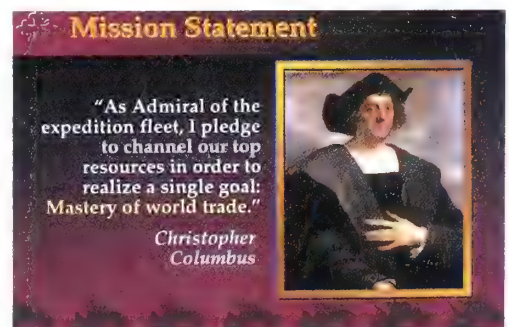
an integrated package that puts most of the features of the contact and project managers into one integrated package called an information manager.

PRESENTATION GRAPHICS

Now you can design, draw, illustrate, and create full color presentations right on your desktop. Because there are so many superb packages, you'll have to take a look for yourself. Request information or demo disks from the manufacturers to help you make up your mind.

Six of the major players include: Harvard Graphics for Windows from Software Publishing Corporation, the newest version of a long-time business classic in this category; Freelance Graphics Release 1.0 for Windows from Lotus Development Corporation, a product rich in SmartIcons and quick import from Lotus 1-2-3; Hollywood, the first Windows application from Claris, a manufacturer highly respected for its packages for the Macintosh; Aldus Persuasion 2.1 from Aldus, which contains Adobe Type Manager for refined fonts on and off screen; Microsoft PowerPoint 3.0 for Windows, which contains the Geniographics driver and GraphicsLink communications programs that allow users to modem files to Geniographics as late as 6 p.m. for delivery as finished 35mm slides the next morning; and Charisma from Micrografx, a presentation graphics package known for its ease of use.

Create dynamic slides for desktop or board room presentations with presentation graphics packages such as Microsoft's PowerPoint 3.0



PRESENTATIONS IN WINDOWS

familiar with one Windows program, the learning curve

is minimized because the interface is similar in all Windows applications."

David Hanna,
President,
Ventura Software, Inc.

"The Windows GUI provides Peachtree the ability to make accounting easy enough for the novice while allowing the experienced user to

Bill Goodhew,
President,
Peachtree Software

Alan C. Ashton,
President,
WordPerfect Corporation



Make Fast Work Of Windows.

Norton Desktop For Windows

File Disk View Configure Tools Window Help

See what makes The Norton Desktop version 2.0 essential for Windows 3.1.

The Norton Desktop version 2.0 for Windows offers a new suite of features that fully optimizes Windows making it easier to use, and helping you be more productive.



Watch Windows 3.1 sparkle.

Experience full drag-and-drop support across the entire desktop.

Drag a file or drive icon to any desktop icon or onto the desktop itself—for instant access.

Copy, move, delete, or print files by clicking

and dragging them to buttons and icons.

We've integrated the File Manager directly onto the desktop, to simplify file and program management. To access files, just click on a drive icon. You'll get over 45 file

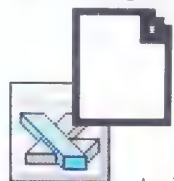
viewers that allow

you to examine a file quickly and easily without pausing to load its application.

And the customizable button bar puts often-used functions at your fingertips.

It all happens quickly, too. Version 2.0

loads up to six times faster than version 1.0 for even better performance.



Frequently used applications and files can be placed on the desktop for convenience.



Double-click on a drive icon to see all your files in a movable, resizable window. Below is a new pane showing a spreadsheet or any type of file you wish to preview.



Keep your favorite Windows applications and files in a customizable icon toolbar.

The best Windows tools you can buy.

The Norton Desktop for Windows comes with a full set of utilities, including fast automatic backup; precision data recovery (with SmartErase™); comprehensive virus protection; and more.

"I never run Windows without it"

Walter S. Mossberg, *Bull Street Journal*, 4/2/92

Because it works the same way as Windows, you'll see instant results.

And it's compatible with all DOS and Windows applications, and leading networks.

To see it, make a fast trip to your dealer. It's only \$179* (SRP), and it's backed with a 60-day money-back guarantee from the leader in quality utilities. Or call, 1-800-343-4714 ext. 779 to

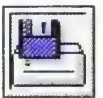
upgrade for just \$49,** or ext. 755 for information! **BONUS OFFER!** Buy The Norton Desktop version 2.0 for Windows and Windows 3.1 together before 6/30/92, and get a **FREE Symantec Game Pack** (\$39 value).***



SmartErase



Printer#1



Backup



AntiVirus

You get all the utilities you need to backup, protect, and repair your data.

WHAT'S NEW

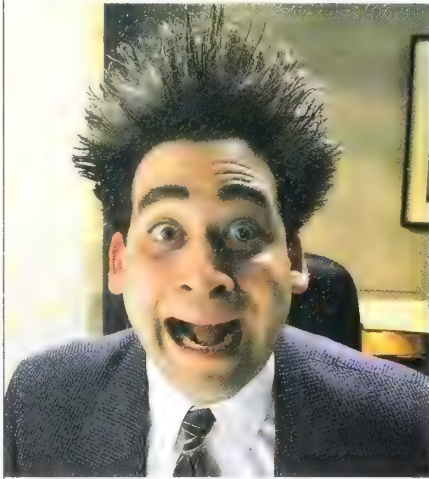
- Faster load time
- Full drag-and-drop across the entire desktop
- Virus protection and repair
- Windows 3.1 editor
- Extended network support
- Macro recorder
- 15 new file viewers
- Customizable fonts
- Version Desktop
- Red Bar icon
- Expanded tree directory



SYMANTEC.

*For call 1-800-554-4403 for an instant FAX Data Sheet (enter 750). ©1992 Symantec Corporation. *Suggested retail price in U.S. dollars. **Upgrade price for registered users — good in U.S. and Canada only. ***Offer good in U.S. and Canada only. International phone: Canada, 1-800-465-2266, Europe, 31-71-353111, Australia, 2-879-6577, others, 1-408-252-3570. All trademarks or registered trademarks are those of their respective holders.

I COULD HAVE GOTTEN IT FREE?



WHY PAY WHEN YOU CAN GET TODAY'S BEST PC NETWORK FREE FROM SITKA?



Yes! For a limited time you can get 2 nodes of Sitka's best-selling 10NET network, a \$198 value, free. All that's required is proof of ownership of two network interface cards.

FREE!

The reason is simple. We know once you try 10NET, you'll be hooked for life.

With 10NET you get everything you've ever wanted in a network. Like the power to share files, programs and printers—and add as many users and nodes as you need. It's incredibly easy to use. And it offers full support for DOS and Windows all in one box.

So what have you got to lose? Call 1-800-795-0014 toll free now for the name of your nearest Sitka 10NET dealer. Because getting anything else would be a waste of money.

When you call, please have the following information ready:
1. Name of your company
2. Address
3. City, State, Zip
4. Phone number
5. Name of your network interface card
6. Name of your computer
7. Name of your operating system
8. Name of your printer
9. Name of your software
10. Name of your network
11. Name of your dealer
12. Name of your distributor
13. Name of your retailer
14. Name of your wholesaler
15. Name of your manufacturer
16. Name of your supplier
17. Name of your vendor
18. Name of your provider
19. Name of your service
20. Name of your support
21. Name of your maintenance
22. Name of your repair
23. Name of your replacement
24. Name of your upgrade
25. Name of your expansion
26. Name of your configuration
27. Name of your installation
28. Name of your testing
29. Name of your training
30. Name of your documentation
31. Name of your manuals
32. Name of your books
33. Name of your magazines
34. Name of your newspapers
35. Name of your journals
36. Name of your newsletters
37. Name of your bulletins
38. Name of your reports
39. Name of your studies
40. Name of your surveys
41. Name of your polls
42. Name of your questionnaires
43. Name of your forms
44. Name of your labels
45. Name of your tags
46. Name of your stickers
47. Name of your stamps
48. Name of your seals
49. Name of your signatures
50. Name of your initials
51. Name of your marks
52. Name of your symbols
53. Name of your icons
54. Name of your images
55. Name of your pictures
56. Name of your photos
57. Name of your films
58. Name of your tapes
59. Name of your disks
60. Name of your floppies
61. Name of your hard drives
62. Name of your memory
63. Name of your storage
64. Name of your backup
65. Name of your recovery
66. Name of your restoration
67. Name of your migration
68. Name of your conversion
69. Name of your translation
70. Name of your interpretation
71. Name of your explanation
72. Name of your description
73. Name of your definition
74. Name of your explanation
75. Name of your explanation

1-800-795-0014

SITKA

ILLUSTRATION PLUS

If you want to use your computer to create graphics you must decide on what end result you are seeking. Packages are available to give you customizable clip art, drawing capabilities, full color painting ability, and complete professional illustration and layout.

Arts & Letters Graphics Editor from Computer Support Corporation and its smaller version, Arts & Letters Apprentice, are two libraries of professionally drawn clip-art images integrated with powerful manipulation, layout, and organizational tools. You can find, position, color, and change the shapes of over 15,000 images in the Graphics Editor.

Windows Draw 3.0 from Micrografx is an entry-level drawing package suited to the novice and to the business professional who need to prepare art for desktop presentations.

CorelDRAW 2.0 from Corel Systems Corporation is another drawing package that can be used by novice and professional alike. Corel's product includes a one hour video that quickly accustoms the user to the program.

For the graphics professional, four manufacturers offer comprehensive tools for a new art form: Harvard Draw for Windows from Software Publishing Corporation gives the user speed with very fast on-screen redraw, file retrieval, and save features, with "erase-as-you-draw" capability; Adobe Illustrator 4.0 builds on Adobe's Macintosh version, the industry leader for years, and includes the ability to edit images in full color in preview mode, typing-on-any-curve capability, and full output choices from comps to color separations; Designer 3.1 from Micrografx includes extensive CAD-rich tools, plus Adobe Type Manager and Adobe TypeAlign, and new text, blend, and color features; and, finally, Aldus FreeHand 3.0 from Aldus offers a full range of capabilities and features for creating simple or sophisticated graphics, from black-and-white laser output to full-color prepress production.

PLUS IN WINDOWS

Windows Draw 3.0 from Micrografx is an entry-level drawing package suited to the novice and to the business professional who need to prepare art for desktop presentations.

Jim Manzi,
President and CEO,
Lotus Development Corporation

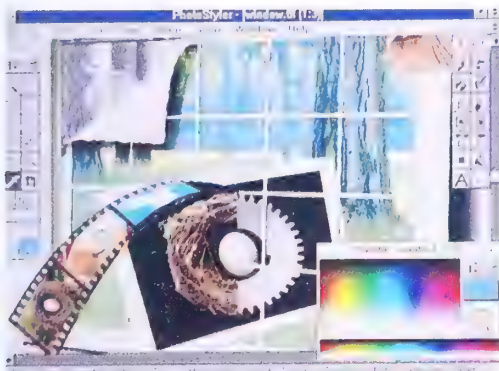
CorelDRAW 2.0 from Corel Systems Corporation is another drawing package that can be used by novice and professional alike.

Mark Eppley,
Chairman and CEO,
Traveling Software, Inc.

Adobe Illustrator 4.0 builds on Adobe's Macintosh version, the industry leader for years, and includes the ability to edit images in full color in preview mode.

Carol Bartz,
President, CEO and Chairman,
Autodesk, Inc.





Turn your desktop into a darkroom with professional image editing packages such as Aldus PhotoStyler 1.1.

SPECIALTY GRAPHICS

To keep your organizational chart up to date, Instant ORGcharting! from Roykore lets you simply point and click to move someone from the mail room to the board room, even with a photograph. Also from Roykore, ABC Flowcharter lets you flowchart complex problems into more manageable parts.

PerForm Pro 2.0 from Delrina Technology, Inc. lets you design, fill, and print professional quality forms. Use standard templates or create your own.

ThinX 2.0 from Bell Atlantic creates a new category of software which its manufacturers are calling intelligent graphics. "ThinX is a program that lets you manage information and draw conclusions through visual relationships," explains Jack Coppley, creator of ThinX.

DESKTOP PUBLISHING

The parent of desktop publishing, Aldus PageMaker 4.0 from Aldus is considered by most to be the industry standard. Aldus PageMaker integrates text and graphics, allowing you to write, design, and produce professional-quality printed communications quickly and easily. With extensive support for long documents, sophisticated text-handling capabilities, and professional typographic controls, PageMaker 4.0 addresses the publishing needs of both business and creative professionals.

Another desktop publishing package that has a broadening share of supporters is Ventu-

ra Publisher 4.0. "In Ventura Publisher 4.0, features like automatic headers and footers, indexes, tables of contents, and backwards and forwards cross-referencing are invaluable to users working on complex documents," says David Hanna, president of Ventura Software, Inc. "The primary benefit to the business user is increased productivity."

TYPE & FONTS

Everyone loves fonts, and with Windows 3.1 you get a full set of scalable TrueType fonts. But if that's not enough for you, look at what Adobe, Bitstream, and ZSoft Corporation have available.

Adobe Type Manager, now included in many packages such as Aldus PageMaker, takes jagged, stick-like text and sharpens it to professional quality type both on the printed page and on your screen. Adobe Type Library is a series of packages containing grouped fonts from Adobe.

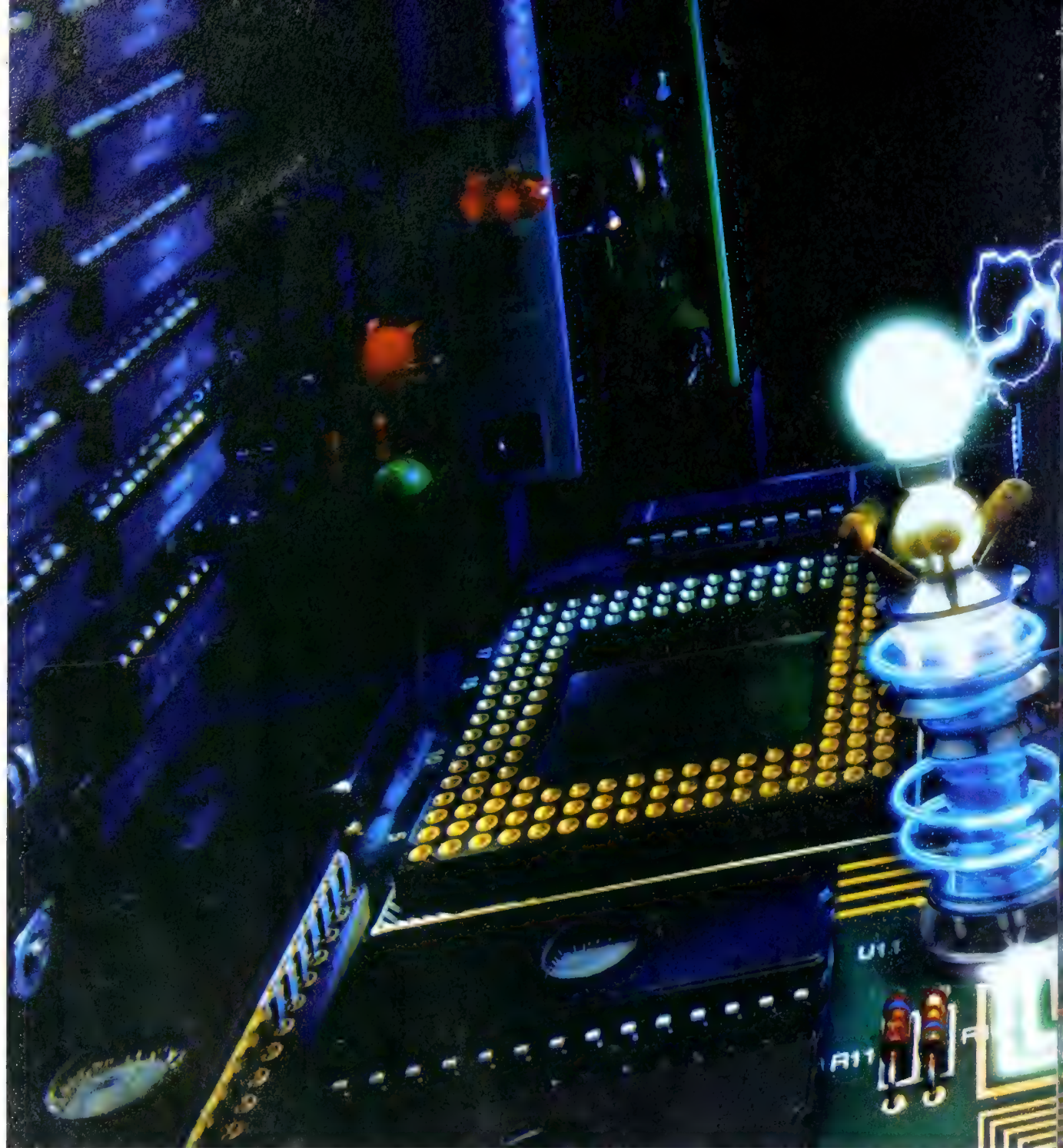
Bitstream also offers a wide selection of font packages such as Bitstream FaceLift 2.0 for Windows. FaceLift 2.0 lets you scale fonts and add effects, such as fills and shadows, and includes advanced font management capabilities. Bitstream MakeUp for Windows lets you add special effects to your type: stretch it, squish it, twist it, flip it, blend it, color it, and more, including 3-D and embossed effects.

SoftType from ZSoft Corporation gives you 62 typefaces in any size and any style all in one package. You can set the densities of grays and blacks, rotate and slant characters, add shadows, outlines, and a 3-D effect, or combine a variety of effects for your own customized fonts. Publisher's Type Foundry, also from ZSoft, lets you create your own fonts, logos, and symbol libraries in any size or shape, dot-by-dot on a bitmap screen.

IMAGE EDITING

Image editing software puts a darkroom on your desktop in a series of steps: scanner support gets a photograph into your computer; image editing lets you alter the photograph,



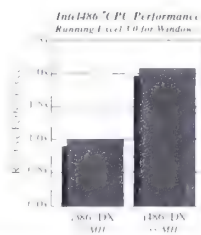


The affordable power so



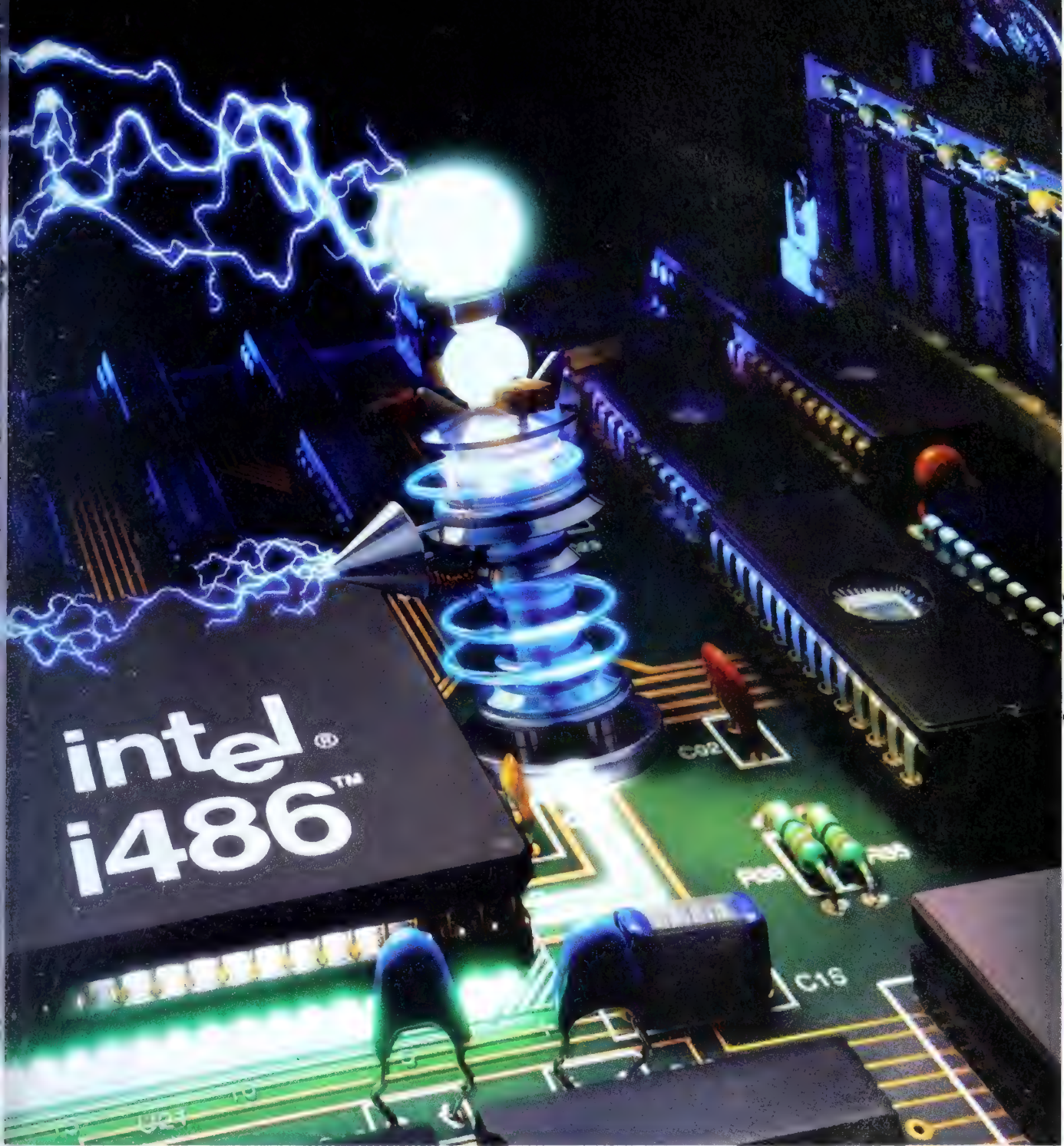
Today's user-friendly software demands a lot of power to really be friendly. And now you can give it the Intel486™ power it needs for a friendly price.

With an Intel486 microprocessor inside, you can take full advantage of today's graphical software. In fact,



where other systems get bogged down. Like running multiple Windows® applications simultaneously, the Intel486 CPU powers through these kinds of challenging operations easily.

Plus, the Intel486 CPU will keep



Power for today's software.

Generating the power you need beyond today. Because the next generation of operating system software—like Windows NT*, OS/2*, Solaris* and NextStep/486*—also needs the power of the i486 CPU.

Ready to get the most out of your windowing software? Then call (800) 228-4549 for a free brochure on the

new standard in desktop computing—the Intel486 family. And plug your software into a real power source.

intel®

The Computer Inside.™

Now that WordPerfect users prefer Microsoft Word for Windows, we're spreading the Word.



The 1992 Coast-to-Coast Word Challenge.

We're calling it "The Word Challenge." And in the weeks to come, we'll be traveling coast-to-coast testing WordPerfect[®] for DOS

NSTL TEST RESULTS, DECEMBER 1991

	Word for Windows	WordPerfect for Windows
Preferred to use	79%	21%
Easier to learn	71%	21%
Easier to use	83%	13%
Would purchase	79%	21%

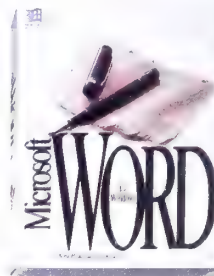
users to find out which word processing program they prefer for everyday word processing tasks.

It started last December when, in a test conducted by the National Software Testing Labs, nearly eight out of 10 WordPerfect for DOS users preferred Word for Windows[™] over WordPerfect for Windows.

As excited as we were about the results, we're even more excited about the prospect of finding out if WordPerfect users all over the country feel the same way. So, we're taking

the NSTL show on the road to ten cities. Everywhere from Washington, D.C. and Minneapolis, to Dallas, Salt Lake City and Los Angeles.

Call for a free "Word Challenge Kit." Included is a videocassette highlighting the test, and interviews with WordPerfect users who took the challenge. Also in the kit are the files you need to test Word on your own. Call (800) 323-3577, Department Z53. We think once you judge for yourself, you'll want to take advantage of our special \$129 upgrade offer.* Then, no doubt, you'll end up spreading the word for us.

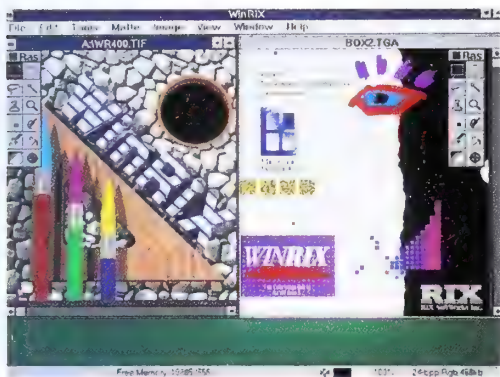


Microsoft
Making it easier

*Offer good for current licensees of WordPerfect, MultiMate, WordStar, MS Word for MS-DOS, and DisplayWrite. Please allow 2-4 weeks for delivery upon receipt of order by Microsoft. Offer expires 6/30/92. Limit one per customer. Reseller prices may vary. Call for system requirements. Offer good only in the 50 United States. To receive only the NSTL test results. In the United States, call (800) 323-3577, Dept Z53. For information only. In Canada, call (800) 563-9048, outside the U.S. and Canada, call (206) 936-8661. © 1992 Microsoft Corporation. All rights reserved. Printed in the USA. Microsoft and MS-DOS are registered trademarks and Windows is a trademark of Microsoft Corporation. WordPerfect is a registered trademark of WordPerfect Corporation.

as in retouching; a paint and special effects program lets you add your own art talent to the image; image color correction allows you to adjust the color; and a color separator prepares images for output devices and presses.

Picture Publisher 3.0 from Micrografx is a fully integrated package that includes all the functionality described above and comes bundled with a Mustek Color Artist 18-bit color and true gray-scale hand scanner, including a scanner card, for \$795 list.



Scan in photographs, retouch, print, alter them any way you like with integrated packages such as WinRIX from RIX SoftWorks, Inc.

Ventura Software Inc. divides its image editing line into four individual packages: Ventura Scan, Ventura Separator, Ventura PhotoTouch, and Ventura ColorPro. Users can economize by choosing only those capabilities they need in their work.

Aldus PhotoStyler 1.1 from Aldus is a fully integrated package for color prepress professionals who use photography, design, and illustration software, or desktop publishing and presentation programs.

WinRIX from RIX SoftWorks, Inc. is another integrated package with broad capabilities, including extensive drawing and paint tools. WinRIX 1.1 lets the business user create or modify images for sales presentations, product demos, reports, multimedia presentations, or any of numerous other business applications.

Lastly, Publisher's Paintbrush 2.0 from ZSoft Corporation is that company's full-featured integrated image editing package. Long

a leader in this category, ZSoft recently came out with PhotoFinish, a low-cost package (\$199 list) for the general business user, which includes scanner support and full-feature image editing for importing images into desktop publishing and presentation programs.

OCR TECHNOLOGY

Optical character recognition (OCR) technology uses software to read text into your computer by either a flat bed or a hand-held scanner. Typist from Caere Corporation bundles a hand scanner and OCR software together at a reasonable price. Text entry is as simple as pressing a button and moving the scanner across a page of text, which then appears right in your word processing application just as if you had typed it in. For flat bed scanners, Caere makes two OCR products, OmniPage Direct for the general business user and OmniPage Professional Version 2.0 for businesses which need advanced OCR software.

Perceive & Perceive Personal from Ocron, another manufacturer of OCR software, are desktop scanner and handheld scanner OCR packages, respectively. And a third entry in this category is Wordscan, the OCR software from Calera Recognition Systems.

FAX MANAGEMENT

By adding a fax card to your computer, you can take advantage of the several capabilities offered by manufacturers of fax software for Windows. Winfax Pro 2.0 from Delrina Technology, Inc. allows you to send faxes from any Windows applications simply by selecting WinFax as your printer.

Unlike ordinary fax machines which transmit at a standard 100x200 dpi, some fax software products such as FAXGrabber from Calera transmit and receive at 200x200, a higher resolution that is perfect for legal and other types of documents that require revision. With FAXGrabber, built-in OCR software uses the higher-resolution to convert the received text into correct file format for immediate use in your applications.



\$2,295 | **\$1,495**
25-MHz | **20-MHz**
i486SX | **i486SX**
12 | **Small**
Drive Bays | **Footprint**
4-MB 32-bit
Upgradeable
to 50-MHz
i486DX2™

LIMITED TIME OFFER

MS-DOS™ 5.0 & Windows™ 3.1 included on all Flyer 32LCT and Flyer 32DT hard drive models.



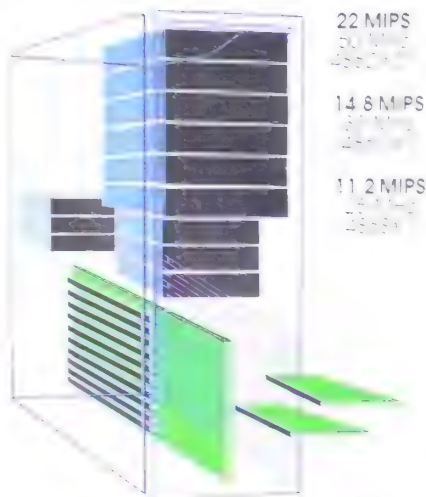
Did Your Last Relationship End

Introducing the ALR Flyer 32LCT

The **Flyer 32LCT** gives you the expandability you'd expect to find in a full-featured tower system at the type of price you'd expect to pay for a desktop PC.

\$2,295

With **twelve drive bays**, **ten industry standard expansion slots**, built-in



Super VGA graphics, and room for 64-MB of RAM, it's the perfect system for growing networks or expansion hungry single users.

The Flyer 32LCT can even keep pace with your changing power requirements. When you outgrow the Flyer 32LCT's current processor, you simply plug in a more



Because You Needed More Space?

Standard on all Models
Integrated 16-bit 512 x 8
Super VGA 800 x 600
upgradeable to 1 MB
1024 x 768 Serial 2
Parallel Mouse Ports and
IDE hard drive interface
3.5" floppy drive
*Price includes hard drive
Systems shown with
optional monitors

Standard on all Models
Integrated 16-bit 512KB
Super VGA 800 x 600
upgradable to 1MB
1024 x 768 - 32-bit
Parallel Mouse Ports and
IDE hard drive interface
3 1/2" floppy drive
*Price includes hard drive
Systems shown with
optional monitors

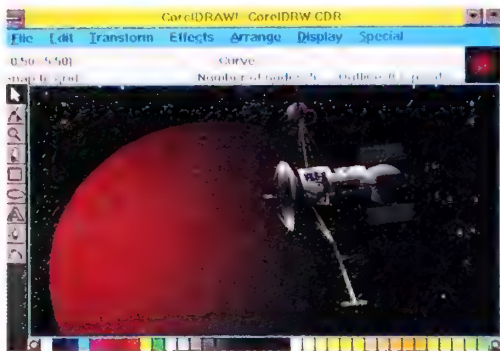
The Flyer Family also consists of some very powerful, upgradeable and economical desktop systems. The PowerFlex FLYER and Flyer 32DT... The Flyer Family also offers two complete multimedia workstations. The Flyer MPC and the FLYER Prices start at just \$2,795

ALR

Irvine, CA 92718
TEL: (714) 581-6770
FAX: (714) 581-9240

Computerland **Connecting Point** **ENTRE**
COMPUTER CENTERS

 IWP BUSINESSLAND **ALR Power Partner
Resellers**



Bring PC graphics to the level of an art form with packages such as CorelDRAW 2.0 from Corel Systems Corporation.

PaperWorks from XSoft, a division of Xerox, is a new fax-based product which lets you control your computer remotely via an ordinary fax machine. With this software, you fax a form to your computer and tell it to store a faxed document on your hard disk, send a fax to anyone at any time, and/or retrieve a document from your hard disk and fax it to you—wherever you are.

CAD

In computer aided design (CAD), the industry standard worldwide is Autodesk's AutoCAD, a professional package that has been intimidating to the CAD novice. Now Windows has eliminated many barriers to use.

AutoCAD Release 11 Extension for Windows makes the process of creating and maintaining designs easier, improves productivity 50-100%, and automates the concept-design-drafting-construction-manufacture-maintenance process. Autodesk believes AutoCAD for Windows will be easier to learn for the non-CAD user, and will open up new markets.

And for those who need a lower level of CAD, Autodesk has a Windows version of its lower-end drawing and sketching package, Autosketch.

UTILITIES

Utilities are programs that let you or your computer do housekeeping tasks. For exam-

ple, Symantec offers the Norton series of utilities for Windows, including the Norton Backup for Windows and the Norton Desktop Version 2.0 for Windows which makes Windows run faster and includes backup, anti-virus protection, automatic desktop arrangement, 45 different file viewers, and other utilities for Windows.

Central Point Anti-Virus for Windows and Central Point Backup 7.2 for Windows, both from Central Point Software Inc., do just what their names suggest, and with CP Anti-Virus you get a Virus Protection Service Plan that keeps your virus protection up to date.

hDC Computer Corporation makes utilities that improve the way Windows works on your machine. hDC's latest utility is hDC Power Launcher, which allows you to customize a toolbar for instant access to any application at any time.

INTEGRATED APPLICATIONS

Integrated applications combine a number of categories of software in one package, such as Legacy 2.1 from NBI which was specifically developed as a combined word processor and desktop publisher Windows application.

Now from Spinnaker, PFS:WindowWorks includes word processing, page layout, spreadsheet, database, graphs and charts, and communications. Also from Spinnaker, PFS:Business Plan focuses on tools needed to develop a complete business plan, including

PRESIDENTS ON WINDOWS

"In addition to ease of use, Windows has given WinRIX 1.1 a very easy interface to other Windows applications, allowing data transfer among multiple applications."

*David Kaye,
President,
RIX SoftWorks, Inc.*

"In 1988, when we started work on CorelDRAW, we were unsure which environment would dominate in the 90's. We chose Windows and fortunately for us so did the PC community—the rest is history."

*Dr. Michael Cowpland,
President and CEO,
Corel Systems Corporation*

"We have always recognized not only the significant capabilities offered by Windows, but the unlimited potential as well. We will definitely be developing more Windows applications."

*Frederick D. Schoeller,
President,
Computer Support Corporation*



word processing, spreadsheet, financial models, business management, and charting functions.

REFERENCE AND MORE

After Dark 2.0 for Windows from Berkeley Systems is a screen saver that prevents monitor screen burn-in when you leave your computer on and unattended. Over 40 amazing displays, including flying toasters, elegant swans, colorful fish, and kaleidoscopes can mesmerize you for longer than a respectable coffee break.

Grammatik 5 for Windows is the latest grammar and writing tool from Reference Software International. Grammatik 5 is the flagship product in a desktop reference line, including the Random House Webster's Electronic Dictionary and Thesaurus for Windows.

Users of laptops or notebook computers on battery power may want to install Battery

Select from over 15,000 professionally drawn clip-art images with Art & Letters Graphics Editor from Computer Support Corporation.



Watch Pro for DOS and Windows from Traveling Software, Inc. A status gauge running under Windows appears as an active icon that warns you that your battery is running low.

NETWORKS

Sitka Corporation's 10NET was the first peer-to-peer LAN operating system to support Windows back in May of 1990. Deborah Triant, president and CEO of Sitka Corporation explains, "Now in its second generation,

10NET 5.0 and Sitka's 10Windows utilities allow users to access the network with the same point-and-click ease that other Windows applications enjoy, instead of typing a cryptic command for access."

MORE GUIs & OS/2 2.0

For those who can't get enough GUI, there are meta-environments, GUIs that sit on top of Windows in the same way that Windows sits on top of DOS.

HP New Wave 4.0 from Hewlett-Packard turns Windows into an advanced desktop. Instead of learning a complicated file system, users simply store information in folders and file drawers. Rooms for Windows from XSoft, a division of Xerox, lets users organize their work by project, task, or client by setting up any number of desktops, or rooms, which when opened contain all the files and applications pertinent to that project, task, or client.

If you are an OS/2 2.0 user, the latest version of IBM's graphical operating system, and you're feeling left out of all these Windows-based applications, relax: most Windows applications, both real and standard mode, will run smoothly on the OS/2 platform.

IBM is currently testing most Windows applications for full compatibility. For those that operate improperly, either because of the application design or because the manufacturer uses undocumented interfaces, IBM is in the process of contacting these companies about resolving any incompatibilities.

So that's the big picture window look at the range of Windows-based applications for business. There are many more existing applications than those mentioned, including a full range of network and communications software plus the growing list of Windows packages for multimedia and pen-based computing.

Windows. It's a new world for business. *

This special advertising section was prepared in conjunction with USA Chicago, Inc. Cover art by Stanislaw Fernandes. Art direction by Platinum Design, Inc., NYC.



Bundle up with an Everex 486/33.



For a limited time save a bundle at \$2,999!

Everex™ has never made an offer like this before. A complete, fully configured upgradeable Tempo M™ Series i486™ DX computer system with all the capacity and performance you could ever want. All you do is plug it in and use it.

It's that simple. We loaded it up and priced it right so you get the most for your money. Take a look at the extras you get for only \$2,999!



- 120MB Hard Drive
- Everex Color/ SVGA Monitor with a 28mm Dot Pitch
- 4MB RAM (expandable to 32MB)
- Dual 3.5" and 5.25" Floppy Drives
- MS-DOS® 5.0 (preinstalled)
- Microsoft® Windows™ 3.1 (preinstalled)
- Standard 101-key Keyboard
- Microsoft®-compatible Everex Mouse
- Everex Mouse Pad
- Free 3-Month On-Site Service Warranty
- Free One-Year Parts and Labor Warranty

Both warranties extendable to three years.

Don't wait. Contact your local Everex reseller now! They're ready to work with you to take advantage of this limited time offer. You won't find an offer this good from any mail order supplier.

Call today and get one of the most popular and reliable PCs on the market — as well as the complete support and service that only Everex can supply.

FOR ADDITIONAL INFORMATION

or the Everex reseller nearest you, call
1-800-262-3839

EVEREX

EVER for EXcellence

Connecting Point™

CENTRE

H

MicroAge

TCBC

CompuCom Systems

Everex, Tempo, and Tempo M are trademarks of Everex Systems, Inc. The Intel Inside logo and i486 are trademarks of Intel Corporation. Other companies and product names are the registered trademarks of their respective holders.

BRAD SILVERBERG ON COMPUTER LITERACY



The haves and the have-nots among today's workforce are being defined by who knows and who does not know computers. Brad Silverberg is Microsoft's Vice President, Systems Division and is responsible for the overall marketing development of Windows. Intimately involved with all aspects of the development of Windows 3.1, Silverberg shares his thoughts on the impact of Windows on computer literacy and the business community.

|| Who in business, from clerical help to CEOs, needs to be computer literate?

|| Business people from the mailroom to the boardroom can benefit from the use of personal computers.

A PC on the desktop today is a very powerful tool

that dramatically increases individual productivity. It can automate routine tasks, provide decision support, crunch through huge spreadsheets and databases, connect the user to others in the same building or across the country, to name a few possibilities.

|| How is Windows helping the business community become more computer literate?

|| Put simply, Windows has spawned products that help business people easily solve problems, so they are encouraged to use computers.

Windows provides a GUI that's simpler and more appealing for the inexperienced PC user. At the same time, Windows is the platform for a new generation of business applications with sophisticated and powerful features for the demanding user.

Windows 3.1, introduced in April, incorporates thousands of changes suggested by Microsoft's customers. It's faster, more rugged, and even easier to use. The popularity of Windows means that many different kinds of applications are available to meet the broad range of user needs.

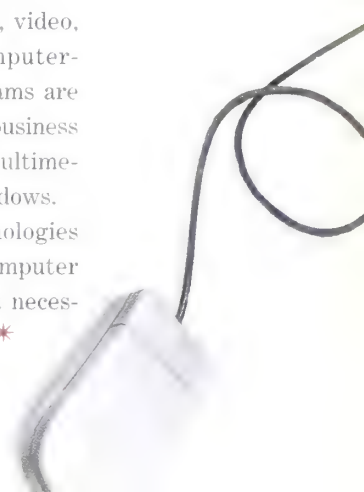
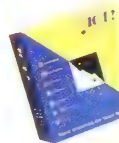
|| What is Microsoft's next step with Windows to "make it easier" for business people?

|| Microsoft will continue to improve Windows technology in many ways. We will improve the user's ability to manipulate, integrate, store, retrieve, and share all kinds of information, both individually and as part of a work group. We'll enhance the networking capabilities in Windows, including connectivity to critical corporate resources on mini and main-frame systems.

With the release of Windows 3.1, there is support for multimedia and pen-based PCs. These new technologies make Windows more powerful and give the user applications that do more things naturally.

Multimedia machines offer an integrated mix of sound, text, graphics, video, and animation. Computer-based training programs are one example of how business will use these new multimedia capabilities in Windows.

Because of technologies like Windows, the computer is not something that necessarily sits on a desk. *



ROLLING ROCK'S MUG RUNNETH OVER

The blue-collar brew with snob appeal is a gold mine for Labatt's

Who knew? When Labatt's USA Inc. bought tiny Latrobe Brewing Co. in 1987, no one imagined its flagging Rolling Rock brand would become the marketing success it is today. Instead, the future looked grim: Throughout the '70s and '80s, many a regional brewery closed or was swallowed up when it couldn't compete with the big guys—Anheuser-Busch, Miller, and Coors. But at a time when the beer industry as a whole thirsts for growth, Labatt's USA has turned Rolling Rock into a splashing success.

Rolling Rock, or R² as it's affectionately called, is the in brew these days: Its blue-collar pedigree seems just right for the reverse-chic 1990s. "It's hard to one-up the guy sitting on the bar stool next to you by ordering a Heineken. That's kind of old hat," contends marketing consultant Al Ries of Trout & Ries, who has been watching the beer's performance. And as it makes inroads into yuppieland, Rolling Rock stands out in a cluttered industry. Total beer volume fell 2% last year, but Rolling Rock enjoyed a 15% volume increase, capping a four-year national expansion (chart). Although it accounts for just under 0.5% of beer industry sales, Rolling Rock is a textbook example of savvy selling that contradicts the common wisdom that says a dying brand can't be revived.

HAPPY HIKER. Created in 1939 by the Tito family, five brothers who bought a tiny brewery the year Prohibition ended, Rolling Rock enjoyed all sorts of undermarketed assets: a distinctive long-neck, green bottle with a painted label, a cultlike popularity on campuses, and the quaint cachet of a single, spring-fed brewery in the small town of Latrobe, Pa. But the largely unpromoted brand began sagging as beer consumption took a sharp dive during the 1980s. In 1985, the Titos

sold the brewery to Sundor Brands Inc., a juice marketer, for around \$11 million. Sundor began moving Rolling Rock into a handful of new markets and raised the price a bit. But two years later, it sold Latrobe Brewing to John Labatt Ltd. for around \$30 million.

The \$5 billion Canadian company needed a growth product to energize its U.S. unit, and La-

barrels, company officials predict, from 414,000 in 1985. To position Rolling Rock as an American beer of import quality, Labatt hiked its price about 7% a six-pack, to \$4.49 or \$4.99, depending on the market. Although the move irked local loyalists, it attracted more fans nationwide. "After the initial shock wore off, it wasn't that bad," recalls distributor Bob Tito, president of Tito Beverages Ltd. and grandson of one of Latrobe's former owners.

HOT AND HOARDED. Labatt now pumps \$14 million a year into advertising and promotions for Rolling Rock. Using the slogan "Same as it ever was," the ad focus on the brew's nostalgic hometown appeal. "Budweiser is brewed in Newark, N.J., on the banks of the Hudson," snipes Rolling Rock Marketing Director John Chappell, whose river geography is a bit off. "That's not a great image."

In contrast, little Latrobe image plays well on the banks of the Hudson and the Charles. And some 26% of its sales nationwide are in restaurants and taverns, giving Rolling Rock the sort of high visibility beer marketers covet. That's partly thanks to in-bar promotions such as its "bucket of rocks" six Rolling Rocks served in an ice-filled metal pail. Labatt USA, with revenues of \$200 million last year, won't reveal Rolling Rock's sales. But it accounts for 60% of U.S. volume.

Now that the beer is so popular, it may be harder to find this summer. The brewery is working at 100% of capacity, and some wholesalers are hoarding Rolling Rock. To ease the squeeze, Labatt is spending \$8 million to expand the plant's annual capacity to 1.2 million barrels by January, 1993.

And then there's the mystery of "33." The unexplained number emblazoned on the back of the Rolling Rock bottle has confounded beer drinkers for decades. Theories abound: Prohibition ended in 1933. Or maybe 33 is the horse pictured on the bottle. Labatt runs an annual "33" contest, asking drinkers

to send in their own theories or solve puzzles for clues to the meaning of 33.

What's the answer? Count the number of words on the back label: They total 33. The Titos, the story goes, noted the fact on their order to the printer, who mistakenly included the number on the printing plate. Or maybe not.

By Maria Mallory in Latrobe, Pa.



IN-BAR GIMMICKS SUCH AS THE "BUCKET OF ROCKS" HAVE HELPED

Latrobe fit the bill. It was "a niche company, the type of brand that could be positioned above the mainstream big-brewer brands," says Labatt's USA President Richard R. Fogarty. Labatt doubled the brewery's output and expanded distribution from its Pennsylvania, Ohio, and New Jersey base to all 50 states. Production next year should reach 930,000

Software Champion.

Start your engines.

That's the rallying cry you'll hear each day at Group Pirelli, one of Italy's most famous companies. For years, they've made the tires that carry the world's greatest auto racers to victory.

But did you know they're also a leading producer of telecommunication and energy transmitting cables, industrial components, engine parts and even rubber gloves?

With all that going on, Pirelli's IS Department wasted no time in making productivity its top priority. "Our industry moves quickly," says Dr. Gianfranco Cappelli, Pirelli's Corporate IS Director, "and turn-around is very important. We always have to know our clients' needs. And we're constantly trying to improve our delivery times."

Since Pirelli switched to CA software six years ago, productivity at both mainframe and PC levels has raced ahead by more than 30%.

"But best of all, CA is the most reliable partner I've ever worked with," declares Cappelli. "I like to



*CA's Computing
Architecture
For The 90s.*

DR. GIANFRANCO CAPPELLI'S
STRATEGIC USE OF CA SOFTWARE
HAS PUT GROUP PIRELLI IN VICTORY
LANE. INFORMATION SYSTEMS
PRODUCTIVITY HAS INCREASED
BY MORE THAN 30%
OVER THE PAST SIX YEARS.

think of them as a pit crew. Their service and support is tremendous. And they develop new products that always seem to fit our needs perfectly. You

don't know how much we appreciate that."

So where does that leave Pirelli?

"Taking the checkered flag, of course."

**COMPUTER
ASSOCIATES®**
Software superior by design.

© Computer Associates International, Inc., One Computer Associates Plaza, Islandia, NY 11788-7000. 1-800 CALL CAI. All product names referenced herein are trademarks of their respective companies.

THE HILL'S YOUNG TURKS

How two bands of young congressmen are shaking up the House



THE DEMOCRATS' GANG OF SIX—(left to right) Luken, Payne, Edwards, Brewster, Condit, and Geren—offers a bold agenda. It includes: A balanced-budget amendment; congressional reform, including a streamlining of committees; tax incentives to spur growth; a Presidential line-item veto; and rebuilding of the nation's infrastructure

Chances are you've never heard of Chet Edwards. Even in the Capitol, only a discreet lapel pin signals that the boyish Texan is a member of the House of Representatives.

But Edwards is unlikely to stay obscure for long. In recent weeks, he and five other freshman Democrats have sparked a revolt in the House. These backbenchers—the Gang of Six—have just strong-armed their own leadership into promising a vote on a constitutional amendment mandating a balanced budget. Impressive stuff for lawmakers whose names aren't household words even in their own districts.

Usually, House neophytes are seen little and heard hardly at all. But the current Congress includes a collection of new, ambitious lawmakers—both Democrats and Republicans—with little use for tradition. These Young Turks want action. Now. They're poised to get it.

That prospect isn't taken lightly by the House's old bulls. Many of them believe the insurgents threaten chaos by

forcing showdowns on controversial issues and internal reforms. "They'd destroy the institution to save it," sniffs one senior Democratic staffer. More important, with a huge freshman class arriving next January, today's insurgents could become leaders of a movement that could topple the House leadership. "The level of frustration has reached volcanic proportions," says Mike McCurry, a Democratic consultant. "It is bottled up and ready to blow."

OHIO'S BOEHNER leads the GOP's Gang of Seven. They're pushing for congressional term limits, a capital-gains tax cut, radical reform of the House committee structure to reduce its partisan nature, a slashing of congressional franking privileges, and a requirement that Congress abide by the same laws and regulations it sets for business



To make up for the lack of formal power in the House, the new-brigade members have mastered the politics of sound bites and talk shows. Above all, they've exploited the public's roiling discontent. Young Republicans have ridden down the resistance of Minority Leader Robert H. Michel (R-Ill.) to force full disclosure of the House Bank scandal. The Democrats overcame the opposition of the leadership on the balanced budget amendment. "It's a myth that as a freshman member you need to keep quiet has evaporated," says fourth-term Republican Lluís Army (R-Tex.).

The Democratic Gang uprising began months ago at a Mexican restaurant on Capitol Hill. Over *chiles rellenos*, moderate-to-conservative lawmakers decided to revive the moribund budget amendment. With the Democratic Establishment reeling from the bank scandal, the Young Turks staged a press conference, lobbied taxpayers' groups, and generated calls and letters from around the country. "I saw that as an opportunity

to take advantage of a political situation to get some reform," says Representative Pete Geren (D-Tex.), the group's unofficial leader. Suddenly, other members began to sign on. Still, group members were stunned when House Speaker Thomas S. Foley, a longtime foe of the amendment, predicted that it would pass. A vote is expected by July.

WHISTLE-BLOWERS. While Geren and his allies—L. F. Payne (Va.), Gary A. Colton (Calif.), Bill K. Brewster (Okla.), Chet J. Luken (Ohio), and Chet Edwards—have been working behind the scenes, the Republican freshmen have been coming on the scene with the subtlety of a hurricane. Last year, when these representatives learned of a General Accounting Office report counting hundreds of checks written by House members, they were furious that their leader

ere content to join Democrats in veeping it under the rug. The young republicans declared war. Says Representative John A. Boehner (R-Ohio): "Even freshmen have about as much power around here as the lint on the carpet. Our only chance of succeeding is to get America as mad as we were." Boehner and his compatriots—Scott L. Lugar (Wis.), Richard J. Santorum (Pa.), Charles H. Taylor (N. C.), John T. Doolittle (Calif.), Frank D. Riggs (Calif.), and Dan Nussle (Iowa)—blitzed talk shows, editorial boards, and columnists. Nussle became the poster child of the revolution when he appeared on the House floor with a bag over his head to dramatize his embarrassment at the scandal. Within a week, the House voted to close its bank. That wasn't enough: They voted the names of the abusers. "I personally even tried to crash a leadership meeting... to let them know we weren't going to let this die," boasts Nussle, 31, the youngest Turk. Fearful House members then voted to release all the names—but at a price to the GOP: two of whom, Riggs and Klug, were on the list of shame. House Minorities Whip Newt Gingrich (R-Ga.), who sneered their bomb-throwing style throughout the '80s, was also embarrassed by 22 bad checks, while another hero, Vin Weber of Minnesota, decided not to seek reelection after his 125 redrafts set off a storm back home. The upstarts' tactics horrify political veterans. Former House Speaker Jim Wright dismisses them as vapid media pranks and sees little difference between the gangs other than paper bags: "One is just more dignified than the other."

ENDING BATTLES. But such scoffing isn't deter the iconoclasts. The Republicans want to limit terms and win more power for the GOP on key committees. Democrats want to hack away at overlapping committee jurisdictions and push for the spending cuts or tax increases needed for a balanced budget. Though the Democratic Turks say they'd like to work within the system, it takes getting beat up to move the party to the center, I'm willing to do it," says Condit. With the arrival of more than 100 new members next year, Representative Jim Leach (R-Iowa) worries that "a more undisciplined Congress" could only deepen the gridlock now gripping Washington.

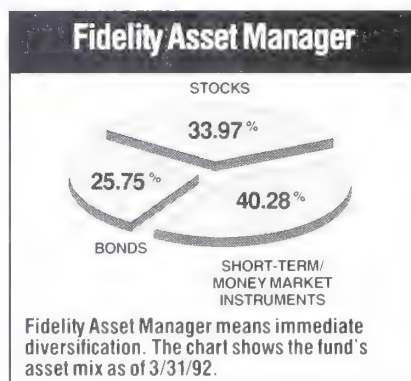
Some Turks themselves may not be und for that. Six of the Republicans are tough reelection battles. And several Democrats could be swept away in an anti-incumbent storm they helped se. But whatever their fate as individuals, they have begun a wave of reform that may change forever a House mired in scandal and institutional impotence.

By Richard S. Dunham in Washington

GETTING THE MOST FOR YOUR IRA?

Diversify Your IRA Assets At Fidelity

If you're looking for a diversified approach to investing for retirement, one that includes an element of growth, consider transferring your IRA to **Fidelity Asset Manager™**. With one simple investment in this **no-load** fund your money is invested across domestic and international stocks, bonds and short-term/money market instruments. The portfolio is monitored and gradually adjusted by Fidelity's managers as market conditions change. Of course, share price and return will vary. Average annual returns: **14.43% for one year and 14.55% for Life of Fund (12/28/88-3/31/92)***



It's Easy to Transfer Your IRA to Fidelity

All it takes is one toll-free call to get everything you need. There's one application, one easy transfer form, and Fidelity handles the rest, no matter where your IRA is now.

Day or night, you'll have access to information about your IRA when you want it. And Fidelity's Retirement Specialists can help you with retirement plan questions. Call today for a free IRA fact kit and join the thousands of investors who are choosing the Fidelity IRA and the expert management of America's largest mutual fund manager.

Visit A Fidelity Investor Center or Call 24 Hours

1-800-544-8888

Fidelity Investments®
Common sense. Uncommon results.

For more complete information on Asset Manager including charges and expenses, call for a free prospectus. Read it carefully before you invest or send money. *Total returns for the period ending 3/31/92 include change in share price and reinvestment of dividends and capital gains. Past performance is no guarantee of future results. You may have a gain or loss when you sell your shares. Fidelity Distributors Corporation.

CODE: BW/FAAI/060192

RIISING FROM THE ASHES OF L.A.

The Hudsons are rebuilding their S&L headquarters—of course

When his father called at 3 a.m. the morning after the fateful Rodney King verdicts, a groggy Paul Hudson simply couldn't absorb the news: The headquarters of his family's 45-year-old savings and loan association in South Central Los Angeles was in flames, and the blaze set by rioters had already consumed most of the building. "My initial reaction was that he was overstating the case," Hudson recalls. "I couldn't believe we'd been looted, much less burned." Not until the next day did he see for himself the smoldering rubble and tangled metal where Broadway Federal Savings & Loan had once stood.

For Hudson, Broadway's 44-year-old chief executive, it seemed inconceivable that his family's thrift would get caught in the fury that swept through Los Angeles that night. After all, black-run Broadway Federal was a South Central landmark, started in 1947 by Paul's activist grandfather, H. Claude Hudson, specifically to lend money to working-class and poor customers. Broadway was the only lender for miles around. Its second-floor community room was a meeting place for dozens of neighborhood organizations. For 15 years, Hudson had kept his office there, continuing a tradition of personal contact with South Central residents.

"I still don't know

why they burned us," he says. But as far as he's concerned, that's not the point. As the Hudson family regroups—at turns sad, angry, and bewildered by their loss—they blame the nation's festering social ills for the turmoil, not the largely hard-working, law-abiding community they see every day. While Hudson admits he "misread the rage," the eruption has recharged his interest in helping South Central save itself. "It's important we send the message that this is a good place to do business," he says. "There was never any question we'd rebuild on this site."

TRADITION. Hudson, who took over from his father, Elbert, as Broadway's CEO in March, certainly has the choice. As the third-generation scion of an upper-middle-class banking family, he's blessed with resources most blacks in America don't have. Hudson grew up in a stable Los Angeles neighborhood and attended the University of California at Berkeley before moving on to law school at Berkeley's prestigious Boalt Hall. As a rookie attorney, he worked in Washington for Wilmer, Cutler & Pickering before ultimately heeding the call of his family's business.

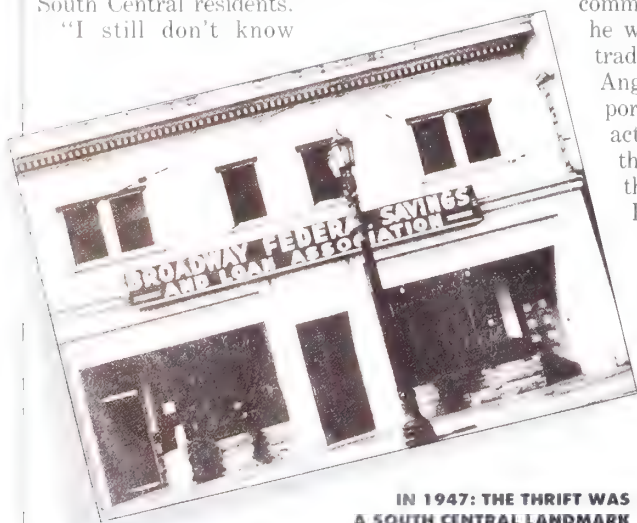
The pull was tradition. Broadway founder Claude Hudson was a community activist long before he was a banker. A dentist by trade when he moved to Los Angeles in 1923 from Shreveport, La., he quickly became active in the local chapter of the National Association for the Advancement of Colored People. As chapter president, he spearheaded an action to integrate the beaches of Los Angeles and led a movement whose credo was: "Don't buy where you can't work." When it became clear that his neighbors couldn't get home loans from white-owned banks after World War II, he orga-



nized a group of investors to launch Broadway Savings. To this day, black Angelenos remember Claude Hudson as "Mr. NAACP." He served on the national board until his death in 1989.

Claude Hudson, who lived to be 92, wasn't the family's only luminary. Paul's other grandfather, and one of Claude's investors, was Paul Williams, a black architect whose designs include the Beverly Hills Hotel and the homes of several Hollywood stars. Elbert Hudson, Paul's father, is an attorney who ran the thrift for 20 years while serving on the Los Angeles Mayor Sam Yorty's police commission. Paul's sister, Katherine, who looks after Broadway's large collection of paintings by black artists while managing the thrift's outreach programs, recently completed a book about her architect grandfather. It will be published soon by famed art-book imprint Rizzoli International Publications Inc.

From the beginning, Broadway's mission was to foster community economic stability by lending to black homeowners. And these days, residential mort-



IN 1947: THE THRIFT WAS A SOUTH CENTRAL LANDMARK



**'IT'S IMPORTANT
WE SEND THE
MESSAGE THAT THIS
IS A GOOD PLACE
TO DO BUSINESS,'
SAYS PAUL HUDSON
OF BROADWAY
FEDERAL**

23 years on the job. The Josephs wanted to consolidate their credit-card debt and do some home improvements. "I have always made my credit-card payments on time," she says. "But I don't think the big bank even looked at my credit report, which is A-1." Says Curtis Joseph: "Everything the rioters did was stupid, but I was shocked that people would do something as stupid as burn down Broadway Federal."

As an S&L, Broadway can't offer a full range of business services, but some executives

have switched over anyway. "You need a banker, not a bank," says Virgil Roberts, president of Hollywood's SOLAR Records, an independent, black-owned record company. "We were with a major bank for six years and would often receive substantial sums of money from distributors. The branch manager said it looked like we might be involved with drugs. If I'd been white with a six-figure balance, he would have been trying to make me a loan."

To Roberts, Hudson embodies the type of involvement too often absent among the black middle and upper classes. "If we had more educated Afro-Americans who had the commitment that Paul Hudson has, many of the ills of the black community would have been solved," he insists. Commitment definitely has its price. In Washington, Hudson would easily be pulling down big bucks. At Broadway, he earns \$76,800.

Of course, not everybody in the black community loves the Hudsons. Some complain that their wealth has been extracted from the neighborhood. Others

feel Broadway is as much a part of the Establishment as any other financial institution. Resentment can run deep. As Hudson drove into South Central the day after Broadway's headquarters was burned, the devastation shocked him. But he also noticed that on his street, Broadway was the only building that was torched. "There were Latinos and whites in the streets, as well as blacks," he says, "and our bank got hit just like Korean-owned and white-owned businesses. The argument could be made that there is racism, but maybe the problem is one of class. There is too big a gap, and too many have-nots."

NO BULLHORNS. Rebuilding will be made easier because the structure—along with the one beside it that housed the main field office of U.S. Representative Maxine Waters—was insured for a total of more than \$2.2 million. No cash was lost except what few dollars employees had left in their personal desk drawers. While the fire left the main-floor vault perched crazily atop the basement vault, both were recovered intact.

If only rebuilding South Central were so simple. The riots reinforced Hudson's belief that community self-sufficiency is essential to saving the inner cities. "It's not realistic to be dependent on government programs and the social-consciousness whims of people from the outside," he says. Washington is mercurial at best when it comes to helping minorities—and only when it serves political aims. That's why Hudson wants to redouble efforts to expand Broadway's branch system while boosting its neighborhood loan activity. "If a bank is in the community and doing well," he says, "maybe an investor will figure it's safe to put up a grocery store next to it."

Hudson's ability to forgive his community is based on his sense that the riot was nothing less than a form of spontaneous combustion—a reaction to years of frustration. "It was a destructive kind of Mardi Gras, violent and horrifying," he says. "There were a lot of people in the street. Jesse Jackson didn't get them there. Louis Farrakhan didn't. There was nobody going around with a bullhorn. Not just in one neighborhood, but all over Los Angeles, people took the Rodney King decision as a clear signal that the system does not work."

Hudson's hope is that the riots prompt business leaders nationwide to reconsider strategies that export jobs and ignore the plight of America's inner cities. "If we are dictated to by short-range concerns and objectives," he reflects, "then I think there are certain consequences, one of which is civil disturbance. If people want to line their pockets today, then they'll have to worry whether their children are safe on the streets tomorrow."

By Jane Birnbaum in Los Angeles

ges still account for the bulk of the million in loans made by the thrift's 300 branches. Deposits, too, come largely through small savings accounts held by working-class neighbors. The big difference between Paul's bank and the bank of his grandfather is that a growing portion of Broadway's loans today are made to Latinos, mirroring Los Angeles' shifting inner-city mix. Broadway, which has a mere \$94 million in assets, sets lending rates about 1/2 point higher than those at large banks—reflecting both the higher risk and the smaller size of the average loan. Because he understands his customers' habits, though, Hudson will offer O.K. loans other banks shun. "They may be late eight times out of 12 months on their payments," he says. "But we will always make those payments." Loans are sometimes given to a person who, while a good credit risk, may be in a tough situation. Hudson recently approved a home-equity loan, for instance, to postal worker Patricia Joseph, whose husband Curtis was laid off after

GENERAL MOTORS: OPEN ALL NIGHT

Lordstown spearheads a plan for flexible, full-tilt production

In 1985, when Detroit was losing the battle over small cars to the Japanese, managers at GM's Lordstown (Ohio) assembly plant set an ambitious goal: Instead of closing or converting to more profitable truck production, they wanted to boost output from 260,000 to 400,000 cars a year. By 1987, thanks to a new, more efficient paint shop and lots of overtime, Lordstown was cranking out 350,000 cars a year. All through the recession, strong demand for its Chevrolet Cavaliers and Pontiac Sunbirds kept Lordstown running full bore. Still, GM wanted more.

So now, it's raising the ante again. "We're going to build more cars on one assembly line than any plant in the world," says Michael J. Cubbin, manager of General Motors Corp.'s Lordstown complex. In early August, Lordstown will become GM's first North American plant to go to round-the-clock production—aiming to turn out 450,000 cars a year in a more flexible factory.

It will not be the last. When GM's directors installed John F. (Jack) Smith Jr. as president on Apr. 6, his mandate was clear: remake North American operations into a profit powerhouse. Round-the-clock factories and flexible, lean manufacturing were cornerstones of Smith's strategy when he ran GM of Europe in the late 1980s. There, he put three assembly plants on round-the-clock schedules, pushing output beyond what had been considered full capacity without spending anything extra on equipment. In North America—where it lost \$7.1 billion in 1991—GM plans to shut underutilized plants, consolidate basic car chassis, and shift work to more flexible, higher-volume operations. By 1994, the auto maker expects to be able to build 14% more small cars in four plants than it did in seven when sales last peaked in 1986.

The round-the-clock strate-

gy may help Detroit close the manufacturing-cost gap with Japan. Chrysler Corp. recently adopted this approach at the St. Louis plant that builds its popular minivans, which bring in an estimated profit of \$4,000 apiece. "You get 50,000 more minivans for nothing," boasts Chrysler Chairman Lee A. Iacocca. "We've got to get efficient, and that's one big way to do it." GM's Saturn plant in Spring Hill, Tenn., may add a third crew later this year. And a GM plant in Arlington, Tex., will stay open while one in Ypsilanti, Mich., will close, partly because Arlington workers voted to go round-the-clock.

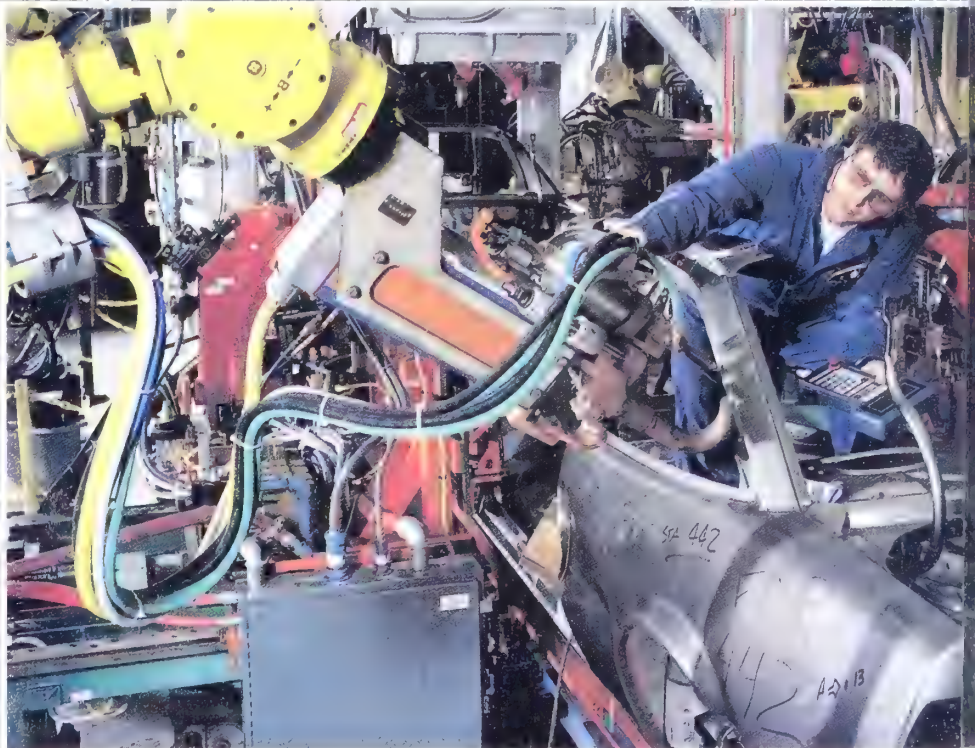
DEAD END. GM's approach is far different than it was in the 1980s. Then-Chairman Roger B. Smith wanted to build workerless factories run by robots and other automated machinery. This time, rather than firing workers, GM will boost Lordstown's production by hiring back 1,500 who were laid off when it closed a commercial van plant in March. There will

be no overtime, and workers will put four 10-hour shifts per week (table).

In short, GM's goal is to get a bet return on its enormous capital investment by running the place full-tilt and redesigning cars for more efficient manufacturing. Currently, the company makes seven small cars on three "platforms," or chassis, that vary by only two inches in wheelbase length. By 1994, it will use a single small-car platform that high-volume plants can build a wide mix of cars to meet changing demand.

To upgrade Lordstown for flexible manufacturing, workers are installing refurbished body-shop equipment that will weld the floorpan, sides, and roof into the basic frame of the car. Salvaged from GM's Janesville (Wis.) plant, which switched from cars to trucks in 1990, the robots and other machinery can easily be reprogrammed. Workers are also being trained to handle a variety of tasks instead of endlessly repeating a few routine jobs. When the new body shop starts on May 30, its archaic predecessor will be shut, and Lordstown will be capable of building four different models. Cubbin insisted the gear be running before 24-hour work starts, to avoid changing too many things at once.

Still, putting the round-the-clock strategy in place can be as difficult as replacing a race car's pistons during the Indianapolis 500. Because Lordstown's machinery will operate more hours a week—turning out some 82 cars



GM IS RETRAINING WORKERS TO HANDLE A VARIETY OF TASKS—AND REDESIGNING ITS SMALL CARS TO BE

ur—preventive maintenance is critical. In the early 1970s, an attempt at round-the-clock work at GM's Norwood (Ohio) plant fizzled in part because the company didn't schedule enough repair time. Logistics will be a nightmare, too, from scheduling just-in-time deliveries of parts to juggling seven-day-a-week shipments of finished cars so they don't arrive at closed dealerships.

BETTER PICTURE. Most important, the new regime will require the full support of the plant's work force at a time when its relations with the United Auto Workers are strained. But the union leadership has long urged U.S. carmakers to rehire laid-off workers instead of relying on overtime. And that's what will happen at Lordstown—with the union's blessing. Twenty years ago, after GM tried to boost production of Chevy Vegas to a Chaplinesque 100 cars an hour, Lordstown arguably had the worst labor relations of any auto plant—maybe of any plant in America. But in 1991, workers in UAW Local 1112 voted overwhelmingly to approve 24-hour production. "We've matured, both on our part and management," says Jim N. Aham, a skilled-trades worker. "Now, most of us on both sides have kids in college, and if we screw up, they won't be there."

Lordstown got the idea for the new schedule from a GM plant in Belgium. During local negotiations for a 1990 labor contract, Cubbin and UAW Local 1112 agreed that workers were being worn down by too much overtime. With a go-ahead from GM and the UAW, two man-

agement and two labor representatives went to Europe. They liked what they saw in Antwerp, where Jack Smith had merged a small plant with a larger one in 1988.

GM's top brass approved Lordstown's plan, and UAW leaders went to work. Committeeman Harry L. Johnson met with groups of 300 skilled-trades workers, who were reluctant to give up overtime pay of about \$190 a week. But the steel-mill valleys of northeastern Ohio are labor territory. "Maybe 70% didn't like losing overtime," says Johnson, "but

Cooperation from the plant's work force is critical—at a time when relations with the UAW are strained

the same 70% liked keeping the jobs of their union brothers and sisters."

Cubbin and his UAW counterparts put together a 500-point plan, covering everything from modernization to training. They let workers, including those from the van plant, choose their shifts and departments based on seniority, as the national labor contract requires. Then, the UAW, not management, interviewed all 7,000 workers to find out what they wanted. Now, the union is matching workers to the available jobs on the shifts they requested.

Workers with seniority opted for ei-

ther the daytime crew or the weekend "swing" shift—which will earn them about \$100 more a week. Tuesday through Friday nights is the least-popular shift. Those workers will make only an extra \$50 a week—and Friday night high-school football games, a big draw in the Lordstown area, will be out of the question. To ensure stability, no one will be allowed to change shifts for the first six months. The peculiar timing of the weekend shift—days Friday and Saturday, then all night Sunday and Monday—means those workers will face jolts to their body clocks akin to jet lag. A nutritionist is schooling them in how to eat to minimize the problem.

The changes at Lordstown are just the beginning. Before it creates a truly flexible factory, the world's biggest manufacturer has some major design work to do. For example, some GM lines install the instrument panel through the windshield space, while others attach the windshield first, then slide the instrument panel through the doorway. In the future, engineers will make sure a wide range of cars is designed to be assembled in a common sequence, and factories will have to be laid out alike so that different models can be built interchangeably. "We have to put in the flexibility we need, since our ability to forecast demand is not that great," says Vice-President Thomas J. Davis, who, as Lansing Automotive Div.'s general manager, is GM's small-car czar.

LESS CLUTTER. Consolidating car platforms will be a big help. With different skins, suspensions, and other changes, models built on a single platform will vary in looks and handling but will be easier to make. They'll share more components and use fewer components overall. For example, when the Pontiac Grand Am, the Oldsmobile Achieva, and the Buick Skylark were converted to the Chevy Beretta's platform last fall, the front bumper went from 33 parts to 17. In all, the Lansing plants that make these cars use 3,800 parts, down from 4,800 a year ago. And they're making 57% more cars per employee now than in 1985.

When Lordstown shifts to its new models in 1994, it should reap similar gains. That, together with the work-schedule changes this year, may make the plant's once-ambitious production goals as outdated as the Vega.

By James B. Treece in Lordstown, with Patrick Oster in Brussels

GM'S FACTORY OF THE FUTURE

As part of its new manufacturing strategy, General Motors plans to make its assembly plant in Lordstown, Ohio, a model for high-capacity, round-the-clock operations

PRODUCTION To boost output by 18% to 450,000 cars a year, Lordstown will add a third crew of 1,500 workers. One group will work 6 a.m. to 5 p.m. Monday-Thursday; a second will run 5:30 p.m. to 4 a.m. Tuesday-Friday. The third crew will work 6 a.m. to 5 p.m. Friday and Saturday, then 7 p.m. to 5:30 a.m. Sunday and Monday

MAINTENANCE Preventive maintenance will be squeezed into the two-hour periods between shifts and the production gap Saturday nights and Sundays

AUTOMATION GM is modernizing part of the assembly line, but, overall, no new equipment will be needed to raise output

INVENTORY AND DELIVERY Suppliers will have to rearrange shipping schedules to make just-in-time deliveries of parts nearly all weekend. GM has to arrange transport of finished cars so that they don't arrive at closed dealerships on weekends

FLEXIBLE MANUFACTURING Over the next two years, Lordstown will prepare to build a more flexible mix of new models that will have fewer parts and more standardized assembly procedures. That will mainly require changes in design and engineering



ONE-SIZE-FITS-ALL CHASSIS



Do you notice anything unusual about this man's computer?

No, it's not an aberration of Newtonian physics.

This man's computer stays attached because he's wearing it. That's right, wearing it.

With the introduction of PalmPAD™, GRiD has created far more than just a new pen computer. We've set the new standard for data collection applications.

Frankly, nothing is easier to use. Entering data, drawing graphics and capturing signatures is a snap.

And PalmPAD is light. Only 2.8 pounds.

Yet, it's tough enough to withstand a 3 foot drop without suffering brain damage.

GRiD PalmPAD also features a large backlit screen. Plus, it's MS-DOS® compatible. So you can customize software applications in no time at all.

And because PalmPAD was designed to accommodate either a modem or a spread spectrum radio, your work force will become a mobile communications center.

Does this mean the end is near for paper forms

and conventional handhelds? We think so.

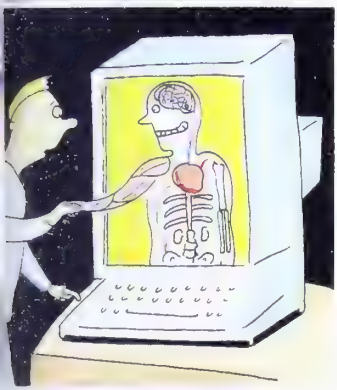
Because whether your mobile work force collects data on their feet, or hands for that matter, nothing proves the speed and accuracy of collecting information like PalmPAD. For more information, call 800-222-8888. And hear about the computer that's turning an industry on its head.

GRiD
Wherever work gets done

Developments to Watch

EDITED BY FLEUR TEMPLETON

ANATOMY 101, THE DIGITAL WAY



It's the computer-age answer to the ubiquitous "invisible man"—the transparent model used to teach students anatomy. Engineering Animation Inc., a computer modeling company in Ames, Iowa, is developing a 3-D data base of the human body that will store detailed models of *Homo sapiens*.

Equipped with advanced CAD/CAM and animation capabilities, the system will focus on body parts—the heart, for example—and peel away tissue layers to reveal structures beneath. It will also display the motion of joints: "Pull" on a wrist tendon would reveal the motion of the hand. Matthew M. Rizai, Engineering Animation's president, says the system will use data from the Mayo Clinic's Biomechanics Laboratory. The company has just been awarded \$2 million by the Commerce Dept. and expects to have a CD-ROM available in three years. The first use will be for training surgeons, but eventually the models may be used to design products ranging from contact lenses to car seats.

THE TAMING OF THE FLU AMONG NEWBORNS

Flu vaccines work safely in children and adults. But they can be ineffective or cause fever in infants under six months—the group at highest risk for the flu. So, researchers are testing a nose-drop vaccine that avoids these problems. Developed at the University of Michigan, Wyeth-Ayerst Laboratories, and the National Institutes of Health, the vaccine has already proven effective in 9,000 adults and children. Unlike the usual flu vaccine, which contains dead virus, the nose drops deliver live, weakened virus. Doctors at the Johns Hopkins Center for Immunization Research tested the new vaccine in 30 infants aged two to five months. Six babies got a low dose, 15 got a stronger dose, and 9 got drops with no virus. More than two-thirds of the first group and nearly 90% of the second developed antibodies that protect against the flu. Babies in the control group developed no antibodies. The nose-drop vaccine needs more testing, says Dr. Mark Hershoff, leader of the Hopkins team, but it may be on the market within three years.

ELECTRIC-CAR BATTERIES GO THE EXTRA MILE

Nickel metal alloys that store hydrogen have been around since the early 1960s. And recently, companies such as Sanyo and Toshiba have been replacing conventional nickel cadmium batteries in video cameras and radio gear with rechargeable nickel hydride units that last twice as long between charges. Now, the technology is getting new attention for use in electric cars. Last week, Matsushita Battery Industrial Co. unveiled the world's first nickel hydride batteries for autos.

Expected to hit the market around 1995, the batteries will cost up to five times as much as their rechargeable lead acid counterparts. But with one of them under the hood, electric cars will do 43 miles on a 15-minute charge—double the distance for a typical lead battery. The new units can also be recharged 1,500 times—triple the number for lead batteries.

Matsushita's worry now: the U. S. competition. By 1995, the Energy Dept. and Detroit's Big Three auto makers plan to spend \$260 million on improved batteries. On May 19, the consortium awarded an \$18.5 million contract to Ovonic Battery Co. in Troy, Mich., a subsidiary of Energy Conversion Devices Inc., to develop a nickel hydride battery.

SYNTHETIC POISONS THAT KILL CANCER BUT NOT PEOPLE

The combination of a natural poison and scientists' ingenuity may result in a new class of potent cancer drugs. In 1987, researchers found that certain types of soil bacteria produce substances, called enediynes, that are downright "diabolical," says chemist K. C. Nicolaou of the Scripps Research Institute in La Jolla, Calif.

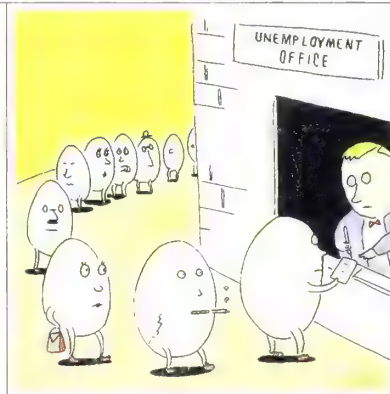
The molecular equivalent of a Trojan horse, the substances innocently enter cells and home in on their genes. Then, when activated by a chemical signal, they turn deadly, destroying the genes—and the cells. Because the enediynes are such powerful assassins, scientists immediately wondered if they could fight cancer. But the poisons have a fatal flaw: They kill normal as well as tumor cells. Researchers set out to make synthetic enediynes, hoping to target only tumors.

Nicolaou's team appears to have succeeded by fashioning an enediyne that's more potent in killing leukemia and other cancers than are such current drugs as vinblastin and taxol. Yet, in lab and animal experiments described on May 22 in *Science* magazine, it didn't harm normal cells. The researchers don't know exactly why, but they're convinced that man-made enediynes will be important in the anticancer battle.

HONEY, THEY SHRUNK THE EGGS INTO HANDY LITTLE PELLETS

When it comes to convenience, eggs leave a lot to be desired. They take up room in the refrigerator and break at all the wrong times. And for food companies that need lots of eggs for baked goods and other products, shipping them frozen is costly. More convenient by far would be tiny lumps of dried, eggy essence.

Food scientist Joseph



H. MacNeil and other researchers at Pennsylvania State University have performed this sleight of egg in a three-step process. First, they put eggs, which are 70% to 80% water, in a vacuum. Most of the water evaporates, leaving behind a thick, yellow solution. This is poured into little cups and frozen using liquid nitrogen. Drying removes the rest of the water. The result: pea-size yellow pellets that are just like the real thing when rehydrated or cooked in food.

If the concentrate is all it's cracked up to be, MacNeil suggests, ordinary eggs may be largely obsolete in a decade.

INSIDE INTEL

IT'S MOVING AT DOUBLE-TIME TO HEAD OFF COMPETITORS

Some 170 employees at Intel Corp.'s plant in Chandler, Ariz., wait expectantly as their shirt-sleeved leader, Andrew S. Grove, throws the meeting open to the floor. It's the latest in a long-running series of forums at Intel facilities around the world where the chief executive of America's No. 1 chipmaker asks employees to download what they're thinking. On this hot morning in April, that's plenty.

For 90 minutes, engineers, assembly workers, and managers alike pepper Grove with tough questions: What's Intel doing to thwart rivals from stealing more business? How will Intel compete with the blazing speed of Digital Equipment Corp.'s new Alpha chip? Is Intel facing the type of problems that plague IBM and DEC? Grove offers no platitudes. Intel, he says, is "under attack."

Hold it, you say. Why are these people so worried? Intel is the fastest-growing and by far the most profitable of the world's top makers of integrated circuits, the tiny slices of silicon that run everything electronic. It's the king of desktop computing, the company whose microprocessors are the brains of some 100 million IBM-style personal computers, five times what its nearest competitor can claim. Intel's grip on the PC market has sent its sales soaring nearly fourfold since 1986, to \$4.8 billion last year, and doubled its profits over that period, to \$819 million.

FAST BREAK. Despite such strengths, however, Intel's main business is facing its biggest challenge in a decade. Led by Advanced Micro Devices Inc. (AMD), cloners of Intel chips are denting its bottom line. In May, the No. 3 U.S. chipmaker, Texas Instruments Inc., announced two souped-up microprocessors. MIPS Computer Systems Inc. and Sun Microsystems Inc. have new designs that outrace Intel's—and will even run the same huge library of programs. Even IBM, Intel's No. 1 customer, has joined with Apple Computer Inc. and Motorola Inc., maker of Apple's microprocessors, to build a new desktop brain. More dis-



ring, PC sales have slowed, cutting demand for chips. All this has raised doubts about how long Intel can count on operating margins of 18% to 25%, its range since 1987. Investors are worried: Intel's stock has tumbled from 68 1/4 last Feb. 19 to 47. Could Intel's desktop dominance finally be coming to an end?

Not without a fight, it won't. Grove is striking back on multiple fronts, hauling winners to court, slashing prices as never before, and for the first time, advertising his chips on TV. He has revamped Intel's strategic vision to focus more on the core microprocessor business. He is personally nurturing "extremely close contacts with the hardware and soft-

**STRIKING BACK:
CEO GROVE (RIGHT)
WITH 586-CHIP
DESIGNERS VINOD
DHAM, AVTAR SAINI,
AND JOHN CRAWFORD**



ware worlds," a key to customer satisfaction. Most important, he has launched a crusade to whisk products to market in a flash. "Ultimately," says Grove, "speed is the only weapon we have."

Intel is no longer content to introduce one or two new-generation chips annually and a whole new microprocessor family every three or four years. In 1992, it will market nearly 30 new variants of its cutting-edge 486 chip. This summer, several months ahead of schedule, it will unveil its next-generation chip, a veritable one-chip mainframe that may or may not be named the 586. For most of the '90s, Intel expects to give birth to new chip families every two years, a blistering pace that Grove thinks will keep cloners in a perpetual catch-up mode.

ALL-OUT FIGHT. This speedup will affect everyone who uses computers. Already, the ever-increasing power of Intel microprocessors has propelled the spread of office automation, computer networks, and "friendly" software any novice can fathom. From banking to fast food, nearly every industry relies on Intel chips in a cash register or a PC. Each new generation has spawned advances in products, services, and productivity. So, as Intel gets faster chips to market sooner, worldwide competition will grow more hectic and intense.

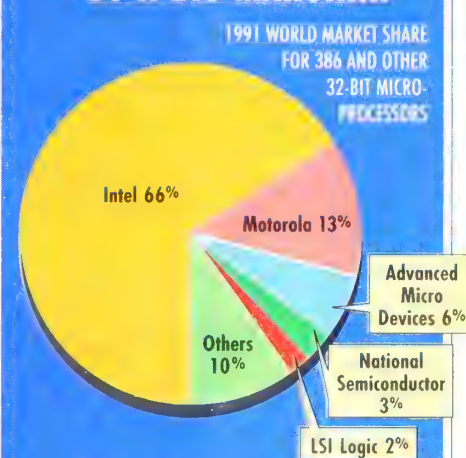
Staying ahead is more than a matter of pride for Grove, 55, who fled the Soviet invasion of Hungary in 1956 and has run Intel's day-to-day operations since the mid-1970s. Microprocessors provide about 55% of Intel's sales and the bulk of its profits, which Grove vows to "fight with everything we've got" to protect. Those earnings enable Intel to outspend, outdevelop, and outmanufacture the competition. They also support its spadework in new arenas, such as supercomputers, interactive digital video, and flash memory, a semiconductor alternative to storing data on magnetic disks (page 90). If its rivals keep gaining, Intel could eventually lose ground all around.

This is no idle threat. Cyrix Corp. and Chips & Technologies Inc. have re-created—and improved—Intel's 386 without, they say, violating copyrights or patents. AMD has at least temporarily won the right in court to make 386 clones under a licensing deal that Intel canceled in 1985. In the past 12 months, AMD has won 40% of a market that since 1985 has given Intel \$2 billion in profits and a \$2.3 billion cash hoard. The 486 may suffer next. Intel has been cutting its prices faster than for any new chip in its history. And in mid-May, it chopped 50% more from one model after Cyrix announced a chip with some similar features. Although the average price of a 486 is still four times that of a 386, analysts say Intel's profits may grow less

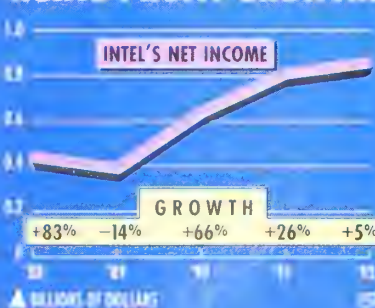
than 5% this year, to about \$850 million.

Intel's chips face another challenge, too. Ebbing demand for personal computers has slowed innovation in advanced PCs. This has left a gap at the top—and most profitable—end of the desktop market that Sun, Hewlett-Packard Co., and other makers of powerful workstations are working to fill. Thanks to microprocessors based on a technology known as RISC, or reduced instruction-set computing (page 94), workstations have dazzling graphics and more oomph—handy for doing complex tasks and moving data faster over networks. And some are as cheap as high-end PCs. So the workstation makers are

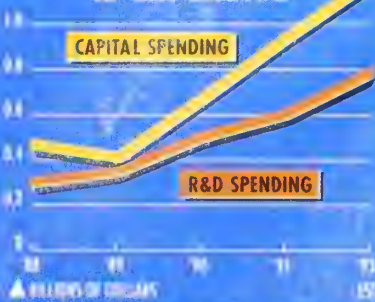
INTEL IS STILL NO. 1 BY A BIG MARGIN...



...BUT COMPETITION HURTS PROFIT GROWTH...



...AND STAYING AHEAD IS EXPENSIVE



Cover Story

now making inroads among such PC buyers as stock traders, banks, and airlines.

Grove's plan for meeting this challenge is to stimulate PC advances. For one thing, Intel is trying to make such gear as its networking circuit boards and graphics chips easier and cheaper to put in PCs, he notes, because new technology "won't help unless the marketplace accepts it." That would also line Intel's pockets twice, since these features often need the extra processing power found only in the newest chips.

Leveraging Intel's ancillary products also dovetails with Grove's grand vision of making the company the center of computing—everything from palmtops to supercomputers. The 586, with its 3 million transistors, will begin to tie all these strands together. It will process 100 million instructions per second, more than double the fastest 486 and equal to RISC chips from Sun and MIPS Computer. **DOUBLING UP.** The mounting RISC-chip threat was the main thing that persuaded Grove to rush chips to market quicker, but the cloners forced his hand, too. Intel had always waited until one generation was ready for production before starting work on the next (chart). That changed in mid-1990. Amid talk of loom-



NEW MIND-SET: EVEN ENGINEERS ARE TAKING CUSTOMERS' NEEDS INTO ACCOUNT

ing competition, Grove "doubled up" on design. He launched work on the 686 generation, due around the end of 1993, two years before the 586's planned christening. By chance, Intel had just canceled a joint computer project with Germany's Siemens. That freed dozens of engineers at the company's Hillsboro (Ore.) site who had been working on 686-type features, including sufficient circuitry to allow redundancy. That's a must for fail-safe computers that can't suffer crashes, such as those handling bank transactions. Now, members of the 586 team, their work largely done, are shifting to the 786 generation, which may be unveiled in 1995. By then, what is now the 686 team should have been at work for two years on the family

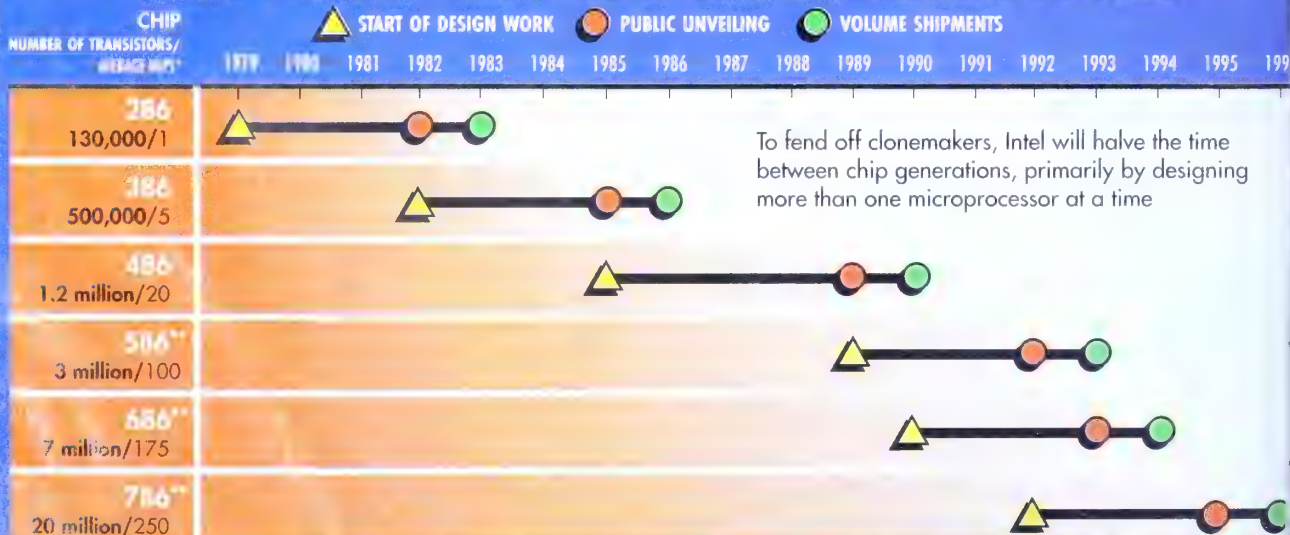
divided into as many as four independent chips for so-called parallel processing. The overall chip will execute 2 billion instructions a second—that's supercomputer territory now, but in years it could be a desktop province.

Building on unknown foundations, Intel is doing with the 686, will stretch the research budget, even for a company accustomed, as Grove once quipped, to betting millions on science fiction. Engineers will feel the heat, too.

Each new generation starts as a dream of a handful of designers who have just finished a previous chip family. In early 1989, for instance, engineers were wrapping up the 486 spent weeks brainstorming the 586. They were trying to balance two ingredients: the num-

that will be the 8th generation of microprocessor generations at once is a monumental endeavor. The 486, with 12 million transistors, took more than \$1 billion and 450,000 years to develop. The goal for the 686 is far more formidable: Its 20 million transistors will process some 250 million instructions per second (MIPS), more than 10 times what the first 486 could do. Somewhere around 2000, maybe for the 886, Intel envisions a quantum leap to 1 billion transistors.

INTEL PICKS UP THE PACE OF PRODUCT INTRODUCTIONS



transistors manufacturing could put a chip three years hence vs. the performance Intel would need by then to stay ahead of its rivals.

By mid-1990, the 586 project was moving fast, toward the current 200 engineers in Santa Clara, Calif. The "real estate" specialists were laying out blocks of silicon for various features. As a section was finished, other engineers translated their diagrams into thousands of transistors and wires. By late last year, the work went late into the night. There were frequent round-the-clock rambles to change the design—say, if manufacturing tripped over a last-minute problem. Just weeks ago, the team added its labors onto a computer tape that generated the masks, or stencils, that print the circuitry on silicon wafers—the first of which are just seeing the light of day. Now, the P6 team that Intel formed in Oregon in mid-1990 is copying the 586 engineers' accumulated knowledge to nail down precisely what the 686 will be building on.

Such efforts depend on a critical resource: Intel's proprietary design tools. As the complexity of microprocessors climbed into the hundreds of thousands of transistors, making manual design unthinkable, Intel invested heavily in design-automation software. "People were probably even wondering at we've been doing with those profits," says David L. House, a senior vice-president. "They've gone into 'engineers' that make it possible to design successive chips, each with

two or three times as many transistors, with no increase in development time." In fact, the product cycle may actually shrink, thanks to a breakthrough from Quickturn Systems Inc., a startup in Mountain View, Calif. Intel Vice-President Albert Y. C. Yu says the Quickturn team should trim at least six months from the usual four-year cycle from conception to volume production.

STLY NIGHTMARE. Called hardware emulation, Quickturn's technology can build a model chip using programmable devices that pretend to be transistors. Quickturn intended the system for simulations but joined with Intel to apply it to the 586. The result is a room-size collection of circuit boards that reflects the performance of the design more faithfully

than software simulations—and runs engineering tests up to 30,000 times faster. Thus able to perform many more tests, the engineers caught numerous bugs before production began. That's important. On the 386, one bad transistor sneaked through—until customers started seeing math errors. It took months to fix the goof and replace faulty chips in the field.

The emulator had one more benefit: blunting the spread of RISC. At a technology forum for PC companies and software developers last November, Yu dialed it up and ran a Lotus 1-2-3 spreadsheet from a terminal. The crowd

before the 586, Intel didn't always bother to ask what they wanted—or listen closely when they volunteered. "They used to say, 'Here's what we've got—how many do you want to buy?'" recalls an executive at one PC maker.

CONFRONTATIONS. Intel's arrogance might have been understandable during the preclone days. It was founded in 1968 by Gordon E. Moore, now chairman, and the late Robert N. Noyce, who in 1957 had invented one form of the integrated circuit. The company went on to create the DRAM, or dynamic random-access memory, now the most common chip in every computer, plus other widely used chips. In 1971, it invented the microprocessor, which ultimately won IBM's approval and became the PC standard. Little wonder Intel felt special.

Grove added a confrontational edge when he took over the reins. With an engineer's logic, he believes that pulling no punches is simply efficient. For instance, any employee can demand an "AR"—action required—of any executive on any issue.

Grove encourages people to iron out disputes by speaking their minds, and they do. It can be unpleasant, but problems get solved faster.

Grove has mellowed since his 1987 elevation to CEO: The company no longer keeps lists of those who miss the 8 a.m. check-in. And starting with the 586, he insisted that Intel put on a new face, especially in dealings with customers. "Historically, we thought of ourselves as a chip-maker," says Grove. That insular attitude began to change in the late 1980s. Today, he says, there's a "strong allocation of resources" devoted to customer support.

The makeover program's Mr. Inside is Craig R. Barrett, a former materials-science professor at Stanford University. After transforming Intel's once-weak manufacturing arm into a fortress of respectability, he was promoted in January, 1990, to executive vice-president—and heir apparent to Grove. Barrett took charge of daily operations, including revamping the product-development process. He's an appropriate choice to head the speed crusade—an avid athlete who relishes marathon bicycle trips.

Both the internal and external efforts



**HUGE MARKET:
FLASH-MEMORY
CARDS MAY BE
IDEAL STORAGE
MEDIA FOR
PORTABLE PCs**

was astonished that a model was already working. Six months later, Compaq Computer Corp. scrubbed its plans for a RISC-based PC. "Intel is back on the high-performance track," says Doug Johns, a senior vice-president at Compaq. The Houston company's decision may also doom the Advanced Computing Environment. This consortium, spearheaded by Compaq, Microsoft, and MIPS, was formed to establish an alternative, RISC-based PC standard.

The other key to shortening the "time-to-money" cycle, as Intel calls it, is concurrent engineering—getting customers and manufacturing involved early in the design. This was a sea change within Intel, which has been infamous for its high-handed treatment of customers. Be-

Cover Story

were crucial for the 586, an unusually pivotal product. It is aimed at large computers as well as PCs, so Intel engineers had to envision how it would fit in those various systems. The designers first visited every major customer, plus major software houses such as Borland International, Lotus Development, and Microsoft, to ask what those companies want-

ed. The result was a list of 147 specific features—many ranked differently from what Intel expected. Doing this at the front end, says Vinod K. Dham, general manager of the 586 group, more than paid for itself by avoiding most revisions in later stages.

Dham is most pleased about the mindset change. Pre-586, Intel engineers got

their kicks from the intellectual joy of devising elegant or efficient solutions to circuit-design problems, regardless of their value to customers. Now, says Dham, engineers think like customers. The most stinging epithet in meetings is: "C'mon, stop being a chiphead."

This attitude is mirrored in marketing, too. Intel surprised many customers late

VIDEO, FLASH MEMORY—THE 'OTHER' INTEL IS COOKING

Intel may mean microprocessors, but its other products are making a name, too. On a visit to Fiji a few years ago, Intel Corp. President Andrew S. Grove met a computer installer. "Oh, yes," said the islander—and recalled buying Intel circuit boards that add to a computer's memory.

The "other" Intel hardly adds to profits now, but it's a ticket to the future. Intel's sales of supercomputers, flash memories, video chips, and networking boards are climbing an average of 68% a year, says Robertson, Stephens & Co. analyst Daniel L. Klesken. And that's not their only value.

Once, Grove saw such business as a hedge against the cycles that whip the chip industry. Not anymore, he says. Now, he counts on other products to keep Intel on technology's cutting edge. That's vital, since Grove wants to make his microprocessors the heart of the computing universe. If one chip equals yesterday's mainframe, a chip quartet hums like today's—and an orchestra can outperform the best from Cray Research Inc. And as technology moves from these computers down to microprocessors, Grove believes that will revive the glory days of personal computers.

VIDEO ERA. Grove is especially keen on PCs that handle moving pictures. Data bases could then be enlivened with sight and sound, and educational software could become as engrossing as TV. For now, the amount of information contained in "full-motion video"



INTEL'S PRODUCT MIX

	MICRO-PROCESSORS	OTHER CHIPS	FLASH MEMORY	PERSONAL COMPUTERS	PC ENHANCEMENT PRODUCTS	SUPER-COMPUTERS	TOTAL REVENUES
1990	\$1.2 BILLION	\$1.2 BILLION	\$5 MILLION	\$412 MILLION	\$235 MILLION	\$50 MILLION	\$3.1 BILLION
1992	\$3.1 BILLION	\$1.4 BILLION	\$200 MILLION	\$380 MILLION	\$310 MILLION	\$150 MILLION	\$5.5 BILLION

SOURCE: ROBERTSON, STEPHENS & CO.

images overwhelms microprocessors. Intel's solution is called Digital Video Interactive (DVI). By ignoring data that don't change in successive frames, DVI chips can compress data in video images by 20 times.

Last October, Intel introduced DVI add-on boards that let PCs play back and manipulate video. Tim Bajarin, president of Creative Strategies Research International Inc., a market researcher, calls DVI the "cornerstone of a new era in computers." By the mid-1990s, Intel expects to add DVI to its everyday microprocessors.

Grove is focusing as well on portable computers, a PC industry bright spot. He thinks sales would perk up more if laptops were smaller and lighter. That's where flash memory comes in. Like the random-access-memory chips that Intel invented, flash memories can

be erased and rewritten quickly. But unlike standard memory chips, they retain data when a computer is off. That makes them an ideal storage medium for portable PCs. Intel has just unveiled a flash card that holds 20 megabytes of data, equal to 13 3/4-inch floppy disks (page 89), and a 40-megabyte version is near. Market researcher Dataquest Inc. expects flash memories to be a \$1.6 billion market by 1995. Flash chips are already used in car electronics, instruments, and military systems, and Intel has 85% of that \$130 million business.

MULTIPLE SMARTS. Intel is also carving out a leading role in massively parallel computing, which experts believe will be the next wave in supercomputers. Systems built around hundreds of microprocessors are already helping pioneers in the oil, chemical, and aerospace industries cope with intractable problems. Intel owns one-third of the \$270 million market for massively parallel computers and has sold 325 systems, more than any other supplier.

The company's experience with all these products should eventually show up in better microprocessors. The future, Grove adds, belongs to PCs that require little or no special training to use. This will take a new breed of chip with the smarts to handle video and sound as adroitly as Intel brains now handle other data. So even if the other Intel never makes a fortune, it seems likely to earn its keep.

By Robert D. Hof in Hillsboro, Ore.



ARRIVE HOME
READY TO MAKE
THAT IMPORTANT
PRESENTATION.

When you fly British Airways Club® Class, you'll enjoy our renowned British service that pays attention to every little detail. You'll arrive refreshed and ready to handle anything that needs your personal attention.



BRITISH AIRWAYS

The world's favourite airline.®

Cover Story

last year by furnishing software simulations of the 586 so they could start engineering their new computers. In the days of arrogance, customers were in the dark until Intel was set to start etching silicon—about now for the 586. The early notice should trim at least six months from the time it takes computer makers to debut 586-based systems, says Yu. For Intel, that should bring in more revenue sooner, cushioning the blow of a chip generation's shorter life cycle.

In yet another departure, the 586 project included help for software companies. Intel engineers wrote so-called software compilers to complement their chip. Compilers are the critical tools that convert programs written in software languages into the special machine language a microprocessor understands. The lack of compilers is one reason that software has lagged at least a generation behind Intel's silicon. Today, six years after the 386's birth, only a smattering of programs takes full advantage of its power.

'RESPONSIVE.' Better service seems to be working. An executive at NCR Corp., pointing to the new collaboration, calls Intel his "microprocessor division." Adds Carl Stork, director of business development for Microsoft's next-generation operating system, or basic software: "They're a much more responsive company."

Skeptics say that to reduce development time, Intel is limiting the power of its chips a bit. And Intel concedes that a two-year interval between generations can't be maintained forever, mainly because manufacturing advances don't come that fast. But for this decade, Intel sees an opening. In fact, Patrick P. Gelsinger, who heads chip design in Hillsboro, says Intel could reach its turn-of-the-century, 100 million-transistor chip a year or two early.

To pull it off, Intel is spending \$300 million on a new Hillsboro facility, slated to open this summer, just to develop the chipmaking processes for the next three chip generations. After that, given the pace of chip technology, the facility will

be obsolete. If Intel can discover techniques for packing more transistors onto smaller chips before its competitors do, it will own a defense against cloners as well. The same methods could shrink existing chips, which would cut costs and prices.

Reaching such goals means sparing no expense, however. Intel plans to raise its research-and-development spending 29% this year, to \$800 million—tops of any chipmaker in the world. That excludes a \$1.2 billion capital budget, up 25% from last year and also No. 1 worldwide. And then there are its technologi-

aftertaste. "I would pay more to get equal-performance microprocessor from anyone else," declares an irritated buyer for one PC maker.

Unless, of course, his customers switch machines with Intel chips. Intel scored a coup with a 1988 ad campaign promoting its low-cost, SX version of the 386. The previously obscure product took off to become the company's all-time best-seller. So, in peddling the 486, Intel contracted 100 salespeople to call on corporations and stress the benefits of "Intel Inside," its new advertising slogan. Grove says nearly every visit results

in a big order for PCs from a computer maker. Still, it's uncertain how long loyalty will last if low-cost clones are available. "It takes more than advertising to convince most customers," says Genelle Trautman, marketing vice-president at Everex Systems Inc., a PC maker in Redmond, Calif.

MORE RISK. Just in case Intel is staying lean, it has fewer employees now than in 1984. Instead of hiring for new projects, it transfers workers from low-turn products. This year, 7% of the workforce moved to new jobs and per-employee sales hit a record \$197,000. Offices at Intel's headquarters are as spartan as the fleet Intel's spartan employees. Even Moore's Grove occupies open offices—though a bit more than most.

Today, Intel is taking its breath as the moves into "first generation." These initial production runs are already a period of great uncertainty.

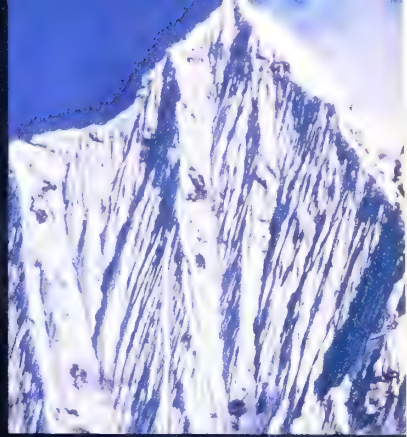
For the 486, the ramp-up to volume output took nine months because of a glitch in the chip's math-processing circuits, which had been beefed up for heavy-duty number-crunching chips. The 586 presents a bigger departure and thus a greater risk. It is Intel's first microprocessor made with a previously called BiCMOS, a hybrid of two chipmaking technologies. Bipolar transistors switch on and off extremely fast, generating so much heat they can melt without refrigeration. By using bipolar for a few transistors that need it, BiCMOS chips keep cool enough



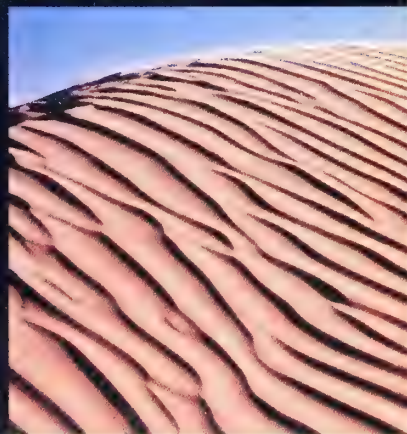
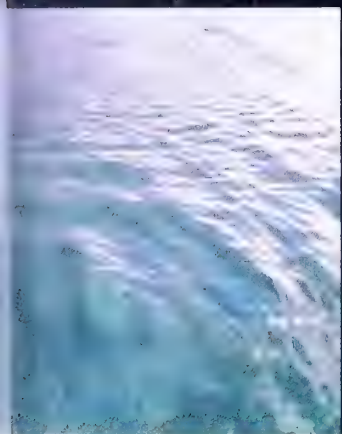
THEIR APPARENT: BARRETT IS RESHAPING THE PRODUCT-DEVELOPMENT PROCESS

cal contributions to joint ventures, such as one with Japan's NMB Semiconductor Co., which is making Intel's flash-memory chips. As mind-boggling as it sounds, plowing 30% of revenues into R&D and equipment isn't outlandish in semiconductor: Reinvesting 20% or more of sales is required just to keep up.

Whether even \$2 billion will fend off competitors hinges on how PC makers and buyers respond to the faster and gentler Intel. Intel's past disdain for customers—particularly its sole-source strategy that fostered shortages of the 386 several years ago—has left a bitter



**Some companies search the four
corners of the world for the most advanced
telecommunications technology.**



**Curious, isn't it, when half the Fortune 500®,
more than two hundred universities
and most major telephone companies have
already found it.**



Technology the world calls on.

that refrigeration is not necessary.

Once the 586 is proven, look for Intel to focus on steering PC makers toward more innovation. For example, it has designed a new machine called the Panther, a PC with workstation power, that customers can license. But some PC makers are wary. Suppose the campaign to seed the PC business with new technology doesn't pay off in quick acceptance of the 586—might Intel market its own computers to recoup its R&D costs? It already rakes in \$400 million building

PCs for companies such as DEC and Unisys Corp., which resell the computers under their own names. Grove insists Intel will never compete directly with buyers of its chips. Says Morgan Stanley & Co. analyst Andrew J. Kessler: "They're skating barefoot on a sword."

So far, Intel hasn't slipped. If anything, most analysts say, its efforts to speed development and cultivate customers have put it on firmer footing. Chances are that even if Intel can't reclaim its near-monopoly in microproces-

sors, it will remain king of the desk for years to come. Even Sun Microsystems and NeXT Computer Inc. are signed to that: They have both promised to adapt their basic operating software to run on Intel chips. That's the sort of news that gets Grove even more fired up. "The more people nip at our heels the faster we go," he declares. "One day, these mosquitoes will be swatted away by the wind." Meantime, Intel is spending a bundle on insect repellent.

By Robert D. Hof in Santa Clara, Calif.

THIS CHIP BATTLE ROYAL AIN'T OVER TILL IT'S OVER

The evidence looks overwhelming: RISC has fizzled. This chip-design technique, which makes computers run at blinding speed, was supposed to challenge Intel Corp.'s bread-and-butter microprocessors. Yet in 1991, a half-decade after reduced instruction-set computing arrived, only 308,000 RISC chips went into desktop computers, says market researcher InfoCorp, vs. the 20.4 million mighty Intel sold. "We have won the RISC battle," boasts Intel President Andrew S. Grove.

The war isn't over yet, however. Software giant Microsoft Corp. soon will release a version of its Windows program that gives RISC chips a new crack at Intel. At present, some 20,000 programs run on Intel-based PCs, five times the number for the best-selling RISC chip, the Sparc from Sun Microsystems Inc. So even a twofold jump in computer speed, the edge RISC typically provides, isn't enough to get most computer buyers to junk their software investments.

Microsoft's new Windows NT software might start to change this. It will work not only on Intel chips but also on RISC chips from MIPS Computer Systems Inc. and Digital Equipment Corp. Any existing PC program can then be run under Windows on machines that use these chips. Here's the message for Intel: It can't count on its software advantage to fend off the RISC intruders forever. And this has turned up the heat under its campaign to speed chips to market.

MAKING HASTE. Intel's chips are based on a technology called CISC, or complex instruction-set computing. The CISC approach dates from the dawn of digital computers: It feeds instructions to a computer's brain in clusters of related operations. Years ago, when computer

memory was expensive and in chronically short supply, this made the best use of a scarce resource. Now that memory is plentiful and cheap, better techniques such as RISC can take hold.

Despite its name, RISC doesn't always mean reducing the number of instructions, though that helps. Mainly, it imposes limits on the number of tasks contained in each instruction.

tions also mean simpler circuits that need fewer transistors. So there's extra room on a RISC chip for speed-enhancing circuits, such as called cache memory.

To speed up its microprocessors, Intel is stealing as many tricks as it can from the enemy. It has tweaked some of the most commonly used CISC instructions so they execute in a single clock cycle. Intel's manufacturing engineers are constantly hammering out ways to cram more transistors on a chip, so designers can boost speed and expand on-chip memory. The result: Intel's upcoming 586 chip will chew through 100 million instructions per second, close to the mark of established RISC rivals such as Sun's Sparc. Still, the latest RISC designs, such as DEC's Alpha and Texas Instruments Inc.'s SuperSparc, keep the edge in speed decisively in the RISC camp.

MARKET EDGE. Intel's most potent countermeasure is its huge market share. It can spend great sums on research and development and on plants, since it can spread the costs over millions more chips than RISC chipmakers can. So Intel can invest more than its rivals and undercut their prices per measure of performance.

Intel doesn't have many options. It has the skill to jump entirely to RISC if need be and, in fact, already turns out RISC co-processors for use mainly with graphics programs. But for now, its microprocessors must rely on some CISC to handle that massive library of existing software. To deal with this restraint, Grove depends on Intel's strengths in design, production, and marketing. "It's that can derail Intel," he declares, "if we fall asleep at the switch."

By Robert D. Hof in Santa Clara, Calif.



With RISC instructions, everything gets done in one split-second tick of the chip's internal clock. A computer that executes each instruction in one clock cycle can barrel along without looking back. By contrast, a computer processing a long CISC instruction must periodically check to see that the clustered tasks are getting done in the proper sequence, wasting time. Simple instruc-



Unflagging success in the World Engineering market.

Who has the scale to show the flag on the international engineering scene?

The answer is Trafalgar House, through John Brown and Davy.

This is one of the world's leading engineering and construction businesses, with more

than 50 offices worldwide.

With 26,000 staff who design and construct advanced plants and facilities for the process, power, oil and gas, and metals industries.

With a range of proprietary and licensed technology that is unrivalled.

We are proud that it flies the colours of Trafalgar House.

A world-scale business serving world-scale industries and clients.



JOHN BROWN

Trafalgar House Public Limited Company, 1 Berkeley Street, London W1A 1BY.



TRAFALGAR HOUSE

A World Force in Engineering.

How do you make the best minivans better? Make them safer.

From day one, the first minivans have been the world's favorites.

We invented the minivans in 1984, and they became the preferred family vehicles almost overnight. By now we've sold over three million, and we continue to outsell all the competition combined.

If you own a Caravan, Voyager or Town & Country, you know why. The front-wheel drive, the handling, the ride, the room, the comfort, the warranty*—nobody has put the whole package together the way we have.

In the last 18 months we've made changes that our customers want and need. We lowered the front end for more visibility, and softened the lines for a more aero look. We improved the front suspension system for a more solid feel of the road. We gave you a choice of engines for the way you drive. We put a child-guard lock on the sliding door.

And during this period, we've been putting our brains and technology to work on an area of increasing concern: safety on the road.

The driver's minivan air bag. America asked for it, we were the first to deliver.

By now, it's an accepted fact that air bags save lives. A lot of lives.

First, we put an air bag in every produc-

tion passenger car we build in the U.S.† Then we were the first to do it for minivans.

Today, a driver's minivan air bag is standard on every Caravan, Voyager and Town & Country. It's fully effective only when used with a seat belt. And it's the most effective protection against injury you can get today. And all our 1994 minivan models will have an air bag for the front seat passenger as well.

By the way, our driver's minivan air bag is probably the most thoroughly tested piece of equipment we've ever installed. And the test results show it works the way it's designed to work.

Holding the road is another reason why we're holding the lead.

Our engineers have pulled out all the stops to help you stop safely when the road is wet and slippery. An anti-lock braking system is standard on Town & Country, and available on Caravan and Voyager. It does what the driver can't do in a potentially dangerous situation.

Special wheel speed sensors detect lockup when it's about to happen. Then braking pressure is selectively adjusted, up to 15 times per second. If one front wheel starts to lock, only brake pressure to that wheel is reduced. If either rear wheel begins to lock, brake pressure to both rear wheels

is reduced. That helps you come to a safe, controlled stop.

Our ABS system went through more than a million miles of testing before it went into our minivans. So you can count on its reliability.

All-wheel drive also makes a major contribution to safety. It gives you much better traction than two-wheel drive on any kind of road surface. It helps keep you in control when you're taking a tight corner in treacherous weather. And you can get it on any of our minivans.

The inside story of minivan safety engineering.

Our safety engineers work with the most advanced technology available to reduce the chance of serious injury in the event of an accident.

"Occupant Kinematics" is one of the fancy terms they use. It's the study of motion during a collision. Using kinematics, restraint systems are analyzed before testing for maximum safety by a computerized three-dimensional model.

We also have a special safety feature for some very special passengers. The world's first built-in child-restraint seat, available on Caravan and Voyager. Our competition doesn't have anything like it.

Nobody likes to think about trouble on the road. But if it happens, you'll be glad our engineers spend every day thinking about it.

When it comes to safety, you don't play it safe.

When you build minivans, you make safety one of your top priorities. We do, because a lot of families are depending on us.

Over the years, Chrysler has added safety feature after safety feature to its minivans. We've met every government safety standard on time or ahead of time, and set new standards of our own. And we'll continue to do so.

The way we build our minivans, and the safety we build into them, has kept us number one.

The final step in the evolution of the minivan: ZEV.

That stands for Zero Emission Vehicle. In other words, the electric minivan. The world is ready for it. We've been planning it for years, and now we're bringing the plan to production.

This September we'll start building a limited number of electric Dodge Caravans and Plymouth Voyagers. Like our present minivans, they'll hold seven people and plenty of cargo. They'll be front-wheel drive, with electric-powered steering and brakes, and optional electric-powered air-conditioning. The range is 120 miles on the highway, 90 in city stop-and-go driving. Then you simply recharge the battery.

In the automotive business you lead, follow, or get out of the way. Our aim is to lead by building our minivans better, building them safer, building them cleaner. So we can reach the only goal that really matters: a satisfied customer.



ADVANTAGE: CHRYSLER 
CHRYSLER · PLYMOUTH · DODGE · DODGE TRUCKS · JEEP · EAGLE

BRR-RING! AMERICA CALLING

Deregulation hits European telecom, and the U. S. comes running

It was one wake-up call that Europe's phone companies won't soon forget. Last year, Anglo-Dutch food giant Unilever PLC opened bids for a three-year contract to run its 17-country European communications network: computer data, electronic mail, and possibly voice calls in the future. A few years ago, one of the home-team carriers, British Telecommunications PLC or Royal PTT Nederland, probably would have won it as a matter of course.

Instead, both were trounced by U.S.-based Sprint Corp., which promised lower rates, guaranteed service, and a bigger network. American Telephone & Telegraph Co. was the runner-up. It didn't even help that Royal PTT's chairman was a 22-year Unilever veteran.

Deregulation is hitting Western Europe's \$110 billion telecommunications market. And a decade after overhauling the U.S. and Japanese telecom industries, competition is shaking up the Continent's hidebound post, telephone, and telegraph (PTT) monopolies.

To be competitive in the 1990s, local and foreign-owned businesses are linking operations across the Continent, and from there to points across the globe. To do it, they need low-cost, high-speed networks that they say they can't easily get from the PTTs. So Unilever and other corporations are turning to the Americans and some local upstarts. "European [PTT] operators have a long way to catch up," says Nick White, Unilever's telecommunications chief.

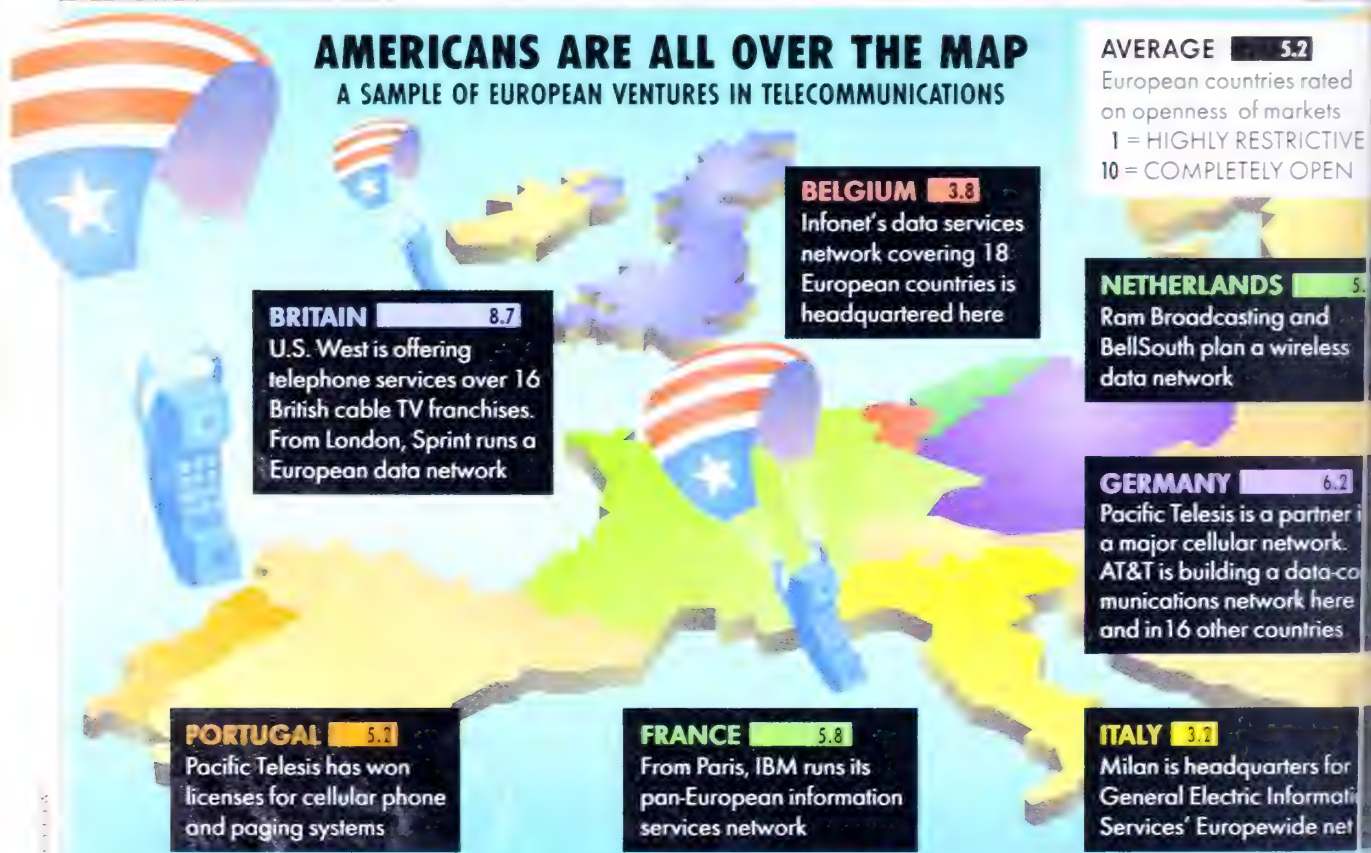
As huge employers and pillars of Europe's old economic structure, the PTTs still have clout. But support is eroding. The European Commission sees advanced networks as essential to make unified Europe competitive. And it fears that competition will keep down costs. As it is, the EC says the big telecom services will jump from 3% of Europe's gross domestic product in 1985 to an estimated 7% by 2000. So the little patience for slow-moving, inefficient monopolies. Says Jean-Charles Rouher, head of the Paris-based International Chamber of Commerce: "The pressures for change are irresistible."

As PTTs try to hold on to their monopolies, Brussels Eurocrats are opening the market, piece by piece. Since laying out deregulation plans in a 1987 road map, the European Community ordered its 12 governments to abolish monopolies in such fast-growing sectors as data transmission and electronic mail. So far, Britain has done the most to deregulate, Greece the least.

'PLANTING THE FLAG.' Now, the U.S. is pushing for more. It's working on opening satellite and mobile communications and private data networks. It's even considering competition in the highly profitable international calling business—perhaps the first step in deregulating

AMERICANS ARE ALL OVER THE MAP

A SAMPLE OF EUROPEAN VENTURES IN TELECOMMUNICATIONS



AVERAGE 5.2

European countries rated on openness of markets
1 = HIGHLY RESTRICTIVE
10 = COMPLETELY OPEN

DATA: BW YANKEE GROUP EUROPE

The HP 95LX palmtop PC.

What is this activity regarding?

Company: Brock & Associates
 Contact: Jack Harris
 Phone: 568-335-1630 X1 3879 CC1
 Title: Marketing Manager
 Sec: 15th and Dambacher
 City: Spring Hill, ST 50 ZIP: 57274
 Meeting: 06/15/92 1105a Followup
 Duration: 1 0623 92 1:07

Time Value of Money - Case 1

Number of periods...	N	=	360.00
Annual interest....	I/YR	=	18.00
Present value.....	PV	=	185,000.00
Future Value.....	FV	=	-36,000.00
Payments per year...	P/YR	=	12
Begin/End mode.....	B/E	=	END
Result: -1,677.96			

Report: B/E N I/YR PV FV
 Calc: 10000 P/YR 12YR PNT

What application? Source Target File Quit

was receptive to the new HP 95LX, as well as the communications hardware that works with the unit. Mr. Botero was interested in the features of electronic mail.

era receptivo al HP 95LX, así como también el equipo de comunicaciones que trabaja con la unidad. Sr. Botero se interesó en los aspectos de correo electrónico.

Appointment Book 05/31/92 1:23 PM
 Tue, 6/1
 Tuesday June 2nd, 1992

- Global Pricing Review
- Lunch with Hans Martin
- Call Barbara with update

Copy Paste Note Find Insert Help Cut Copy Note Find Watch



Don't forget to pack your office.

Just because you're out of the office doesn't mean you have to be away from your critical business information. Now you can transfer your files and take them with you. With the HP 95LX. An MS-DOS® based computer that measures just 6.3" x 3.4" x 1" (closed).

The HP 95LX is packed with built-in software. Lotus® 1-2-3® lets you take your spreadsheets with you. Do "what ifs." And attend meetings with all the latest figures. Phone Book allows you to instantly access names, phone numbers and ad-

resses. Appointment Book lets you monitor your schedule. There's even Memo Editor. And, of course, a powerful HP financial calculator.

Dozens of optional applications are also available. For example, SkyStream receives messages wirelessly. Money Manager tracks monthly expenses. ACT! manages client data. Globalink translates languages. And IntelliLink interacts with Microsoft® Windows.

The HP 95LX applications reside in the 1-Mbyte ROM. There's up to 1-Mbyte RAM for *your* files. And

with the plug-in slot, plenty of software and memory can be added.

Call 800-443-1254, Dept. 29 for details and U.S. retailer locations. In Canada, call 800-387-3867. After all, you're going places.



**HEWLETT
PACKARD**

Microsoft and MS-DOS are U.S. registered trademarks of Microsoft Corporation. Lotus and 1-2-3 are U.S. registered trademarks of Lotus Development Corporation. ACT! is a product of Contact Software International Inc. SkyStream receiver is a product of SkyTel. Money Manager is a product of Autabyte Corporation. Globalink is a product of Globalink Inc. IntelliLink is a product of IntelliLink Inc. © 1992 Hewlett-Packard Company PG12202A

Information Processing

voice service, which accounts for 90% of European telecom revenue. "There's no end in sight," frets Wim Dik, chairman of Holland's state-controlled Royal PTT.

Americans are jumping into these markets as soon as there's an opening. Along with a handful of local players, they're pushing into services the PTTs have been slow to enter (table, page 98). "We're planting the flag," says Joseph P. Nacchio, president of AT&T Business Communications. "This is an opportunity to provide Europe-wide leadership."

The Baby Bells have been particularly active: They're in cellular phones, paging, and cable TV. Several are seeking licenses to launch national cellular networks they plan to weave into pan-European networks. Pacific Telesis Group estimates that such networks could grab as much as 20% of Europe's total voice and data traffic in the next 15 years.

The newcomers say the biggest opportunity is in transborder communications, which have been all but ignored by the parochial PTTs. As a result, the far-flung, private data networks that U.S. businesses take for granted—to link a bank's branch offices, for example—are still a nightmare to arrange in Europe.

A handful of U.S. companies—Gener-

al Electric Information Services, IBM, In-
fonet, and General Motors' Electronic
Data Systems—have already launched
private, pan-European data networks.
Now, phone giant AT&T is rolling out a
17-country network for corporate data.
AT&T will lease lines from the European
phone companies, make sure all the
transborder connections work, and sub-
mit a single monthly bill, rather than
one from each PTT. When regulations
loosen, AT&T says, it will add voice.
Meanwhile, Pan American Satellite has
won licenses in France, Germany, and
Britain to beam corporate data commu-
nications from its satellites.

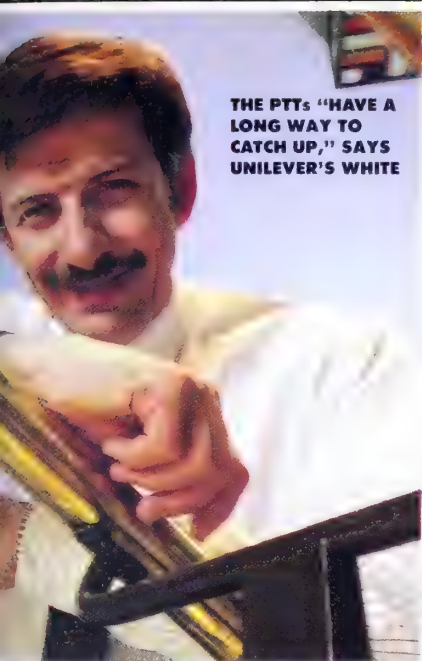
DATA JAM. At this point, out-competing
the PTTs in data services isn't that
difficult. A recent survey of customers
who use public networks to transfer
data across borders shows that 20% of
connections fail. And even after recent
price cuts, tariffs are sky-high. Average
rates are as much as eight times as high
as those in the U.S. for the private
digital leased lines needed for computer
networks.

High prices and poor service from
PTTs can complicate the logistics of con-
ducting business across a unified Eu-
rope. Just ask John C. Sale, network



strategy director for Rank Xerox Ltd.,
which wants to save money by consol-
idating five European data centers into
one in southwest England. But that
would require lots more data traffic be-
tween Britain and the Continent. The
cost: \$25 million over the next seven
years. That would nearly wipe out the

WHO MANAGES THE NUMBER ONE INSTITUTIONAL FUND IN ITS CLASS?



THE PTTs "HAVE A LONG WAY TO CATCH UP," SAYS UNILEVER'S WHITE

projected savings. "At this point, telecom is a barrier to our quest of operating in a single market," he laments.

Americans aren't the only ones taking advantage of these opportunities. Electrical utilities from Scotland to Spain and a group of 11 national railroads all hope to open their private networks to

public use. British Aerospace PLC and Daimler Benz plan to sell capacity on their satellites. And industrial giants in search of diversification, including Germany's Mannesmann and Sweden's Kinnevik, are developing cellular systems.

Still, American companies are the most aggressive. General Electric, for example, shocked Europeans in 1989 by threatening to sue the Belgian phone company for refusing to supply it with the lines for a data network. "Litigation is not in our European culture, so PTT abuses have been tolerated for years," says Hugh Small, head of telecommunications services at consultants A. D. Little in London. "The Americans are ready and willing to fill the vacuum."

ON THE OFFENSIVE. Americans can't expect clear sailing, however. PTTs have ways to impede the Americans. Candace Johnson, the American founder of Teleport Europe, complains that her private satellite service, based in Hannover, Germany, must pay exorbitant rates for capacity from state-owned Deutsche Bundespost Telekom. And she says Telekom is using her customer list to identify sales prospects. That, she says, is how Telekom snared a large German savings bank just as the bank was ready

to sign a contract with Teleport last fall. Telekom doesn't admit guilt, but a spokesman says: "You can never say there's no fault in a company this big."

The European phone companies aren't just playing defense. Prodded by the new competition, many are investing in fiber-optic lines, adding services, and cutting prices. They're also forming alliances to create voice and data networks. The phone companies of France and Germany have joined forces, as have those of Sweden and Holland. France Telecom recently bought stakes in private data networks in Britain, Germany, and Italy.

Meanwhile, the Americans are happily watching bureaucrats chip away at the monopolies. "We must break up the major bottlenecks, especially in intra-Community competition," says Herbert Ungerer, head of EC telecom policy. That's music to the invaders' ears. "The PTTs realize there's only so much sand they can throw at the tide to hold it back," says Seth Blumenfeld, president of MCI International. That's the kind of talk Americans first heard 20 years ago when MCI's William G. McGowan predicted the demise of another ancient monopoly: AT&T. And look what happened.

By Jonathan B. Levine in Paris

DAVID J. EVANS/OLY



It shouldn't be surprising that, among all insurers, The Equitable had the top performing institutional Separate Account in a recent survey by *Financial World*. Or that two other institutional funds we manage ranked in the top ten.*

After all, The Equitable is one of the nation's largest institutional money managers. The assets we and our subsidiaries manage, including those for a long and prestigious list of corporate and public pension clients, grew to an all-time high of

\$145 billion at year-end 1991.

The reason that top business people place their confidence in us is simply this: our seasoned investment professionals have produced consistently solid results, keyed to each client's objectives.

To learn more about The Equitable, please write to Richard H. Jenrette, Chairman and CEO, or Joseph J. Melone, President and COO, at The Equitable, 787 Seventh Avenue, Dept. A, New York, NY 10019.

THE EQUITABLE

Among insurance company separate accounts. For the one, three, and four two of the funds five-year periods ended December 31, 1991.

©1992 The Equitable Life Assurance Society of the United States, NY, NY 10019



SWAP FEVER: BIG MONEY, BIG RISKS

Trade in these customized contracts is revolutionizing global finance—and scaring regulators

Just one day before Olympia & York Developments Ltd. filed for bankruptcy protection (page 26), an unusual auction notice appeared deep in the back of *The Wall Street Journal*. In 11 inches of minuscule type, the advertisement invited blue-chip banks to bid on some of the most sophisticated financial vehicles around: a string of big interest-rate swaps between O&Y and Japan's Dai-Ichi Kangyo Bank Ltd.

The seller was Morgan Guaranty Trust Co., which had seized the swaps when O&Y defaulted on a loan to Morgan and seven other banks. All in all, O&Y had some \$1 billion worth of swaps outstanding. Although Morgan's swaps, which had been pledged as collateral on the loan, were worth an estimated \$10 million, O&Y owes nearly \$80 million on its other swaps to banks and dealers.

Virtually unknown just a few years ago, swaps and related "derivative" instruments have become a key—and increasingly controversial—component of the capital structure of major financial

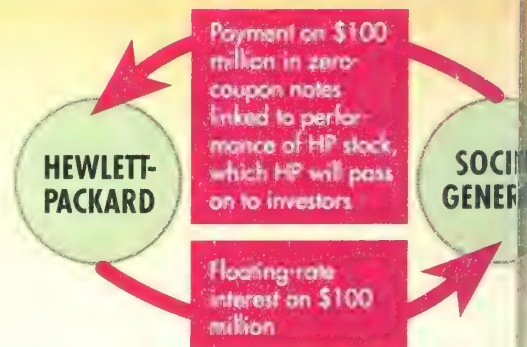
institutions and corporations. In essence, a swap is a risk-transfer mechanism, an exchange of payment obligations between two parties—for instance, fixed-rate for floating-rate interest payments. From a handful of rudimentary deals in the 1970s, swaps have mushroomed into one of the largest and most efficient financial markets on earth (chart).

With some \$5 trillion in contracts out-

standing worldwide, the size of the swaps market now eclipses the value of all the shares listed on the New York and Tokyo stock exchanges combined. Swap portfolios amounting to hundreds of billions of dollars are becoming commonplace, with Morgan alone boasting \$355 billion in deals, some two-thirds of them arranged offshore. "It's a total global business," says Peter D. Ha-

ANATOMY OF A SWAP

Hewlett-Packard wanted to raise \$100 million worth of Canadian dollars for three years and pay a floating interest rate. By doing a swap in April with Société Générale Securities, its underwriter, HP was able to save about \$100,000



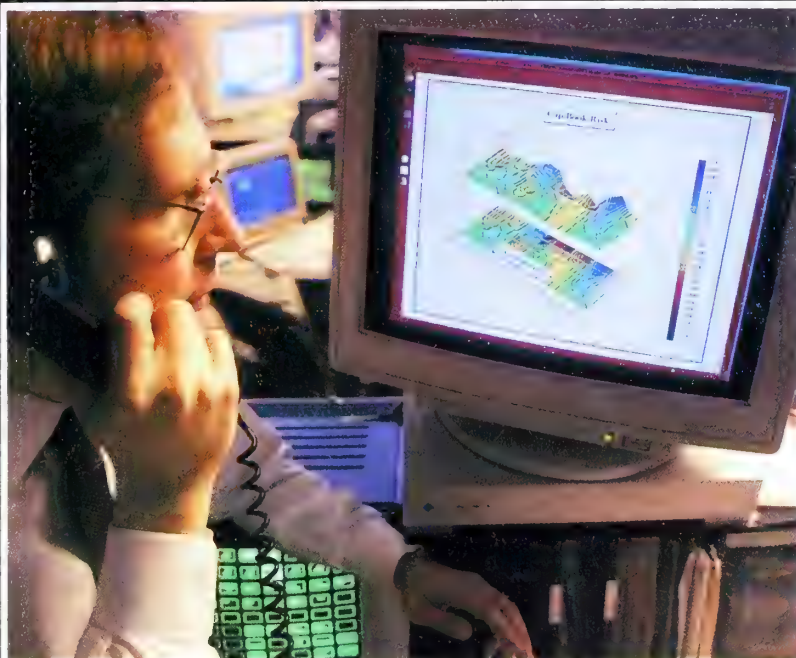
ck, a Morgan manag-
g director.

In this global bazaar,
ngstanding regulatory
arriers and distinctions
mong equity, debt, and
ommodities are being
st aside in a whirl of
ten-esoteric financial
engineering. Hunched
ver souped-up Sun Mi-
osystems Inc. work-
stations, \$500,000-a-year
vappers now bombard
e likes of AT&T, Mc-
onald's, and Ciba-
eigy with custom-de-
signed deals. With a
w taps on a keyboard,
aders transform fixed-
rate dollar loans into
en-denominated float-
ers, or make Treasuries
have like the Stan-
ard & Poor's 500. They
an even create a "syn-

thetic" security that replicates the cash
flow of a real oil well. Marvels Nobel
laureate and University of Chicago econ-
omist Merton Miller: "You can make al-
most anything out of anything."

But as swaps have blossomed, so has
concern about their potential drawbacks.
With banks still bleeding from their dis-
astrous forays into Latin America and
real estate, notes New York Federal Re-
serve Bank President E. Gerald Corrian,
speculation in swaps may be the in-
dustry's next big problem. "High-tech
banking and finance has its place, but
it's not all it's cracked up to be," he
warns. Rather than reducing risks,
swaps may even be "introducing new
elements of risk into the marketplace."

THE CRUNCH NEXT TIME. Chief among
those risks, others contend, is the swap
market's expanding web of interconnec-
tions. Some fear swaps could eventually
transmit financial shocks from market
to market and country to country at
lightening speeds. Most swap deals are
unsecured and exposed to ever-more-vol-
atile interest-rate, currency, and futures
markets. If an institution on one side of



BALANCING ACT: A MERRILL TRADER STUDIES A 3-D MAP OF THE FIRM'S EXPOSURE

a swap is unable to keep up its payment,
then the counterparty on the other side
may have to suspend payments. Under
extreme conditions, that could lead to a
broad seizing-up of the market.

Central bankers and an increasing
number of senior industry executives
also worry that no one really under-
stands the full scope of what's going on.
The market is highly secretive. Most
deals are arranged off corporate balance
sheets and seldom disclosed publicly.
"Where will the next credit crunch be?"
asks economist Henry Kaufman. "We're
not even out of the current one, but the
next one will be in derivatives."

Such concerns are based on the bitter
experience of several near-disasters.
Since 1988, regulators in Britain, New
Zealand, and the U.S. have had to
scramble several times to keep money
markets functioning after swappers
went under. Federal Reserve officials,
for example, were obliged to move onto
trading desks in Boston and on Wall
Street to help unravel the billions in
swap deals left behind by the failures of
the Bank of New England Corp. and

compared with the \$700 billion traded
every day on the world's currency mar-
kets. Proponents also argue that swaps'
risks pale beside their abundant re-
wards. "Swaps perform a valuable func-
tion," says Richard L. Sandor, executive
managing director at Kidder, Peabody &
Co. "They allow a lot of people to man-
age interest-rate risks more effectively."

COMMON NEEDS. Indeed, swaps are, at
their most basic, an elegant, simple, and
cheap way of solving many financial
hedging requirements for parties with
opposite but complementary needs. Take
a bank with lots of fixed-rate deposits
and floating-rate mortgages. It fears its
profits will plunge if yields decline. An-
other bank has lots of floating-rate de-
posits and fixed-rate loans. Its profits
will be squeezed if money-market yields
rise. From these banks' common need
for protection, a swap is born.

With a bank or broker as the typical
intermediary, the two institutions agree
to exchange interest payments on, say,
\$1 million in mortgages for the next
three years. In so doing, the bank with
floating-rate mortgages will now receive
a steady cash flow even if yields fall. If
rates go up, the bank with fixed-rate
mortgages will receive rising payments
from its counterparty to cover its losses.

The banks could create similar hedges
by purchasing Treasury futures or op-
tions every few months. But they might
not want to go through the hassle and
cost of constantly renewing the hedges
for several years. On top of that, the
banks might be obliged to classify such
instruments as assets, forcing them to
put into reserves scarce capital that
might otherwise be used for loans. But
swaps involve little or no principal and
thus require very little capital to be set

THE SWAP WORKED Both parties
aged payment obligations. SocGen mar-
in equity-linked, zero-coupon note giving
s a return that depends on the future per-
centage of HP stock. At maturity, investors will
ween \$90 and \$143.60 for each \$100 in-
SocGen executed the swap by covering
payment obligation to note investors. It will
the payment, which HP will pass on to
rs. In return, HP pays SocGen a floating
rate on \$100 million in Canadian dollars.
the note matures, HP will repay the Cana-
nds it borrowed to SocGen

HOW BOTH SIDES BENEFITED HP pays
an interest rate to SocGen that is about a tenth
of a percentage point less than it would have
had to pay on a regular floating-rate issue. And
it avoided the risk of making payments to inves-
tors based on HP's stock performance. SocGen,
in turn, hopes to earn enough through underwrit-
ing fees and trading in HP stock and options to
compensate itself for the lower interest from HP
and the risk related to the price of HP's stock

DATA: HEWLETT-PACKARD FINANCE CO., SOCIETE GENERALE
SECURITIES CORP., BW

aside. "That helps stabilize our earnings," says Joram Fridman, who, as senior vice-president of National Westminster Bank USA, manages \$6 billion in swaps. "Not using our balance sheet is a benefit."

While such plain-vanilla interest-rate swaps have long been the backbone of the market, they're no longer a bonanza to dealers. "In 1985, there were only 10 dealers who could give you a quote on a \$100 million, five-year swap," recalls Edson V. Mitchell, senior managing director at Merrill Lynch & Co. "Now, you could easily get 100 bids." As a result, a typical swap involving payments on \$100 million worth of loans may now yield a dealer as little as \$20,000—one-tenth of what it would have brought during the mid-1980s.

To keep profits up, banks, brokers, and insurers have resorted to crafting ever-more-complicated and longer-term instruments. Take Hewlett-Packard Co. (table, page 102). It wanted to raise \$100 million worth of Canadian dollars for three years. So, in April, it entered into a swap with Société Générale Securities Corp., the New York investment-banking arm of the big French bank, that made use of bonds, Canadian and U.S. dollars, equities, and options.

The result was an "equity-linked" note. In lieu of interest, HP agreed to pay investors a return based on the price of its stock in April, 1995. But HP took on no equity-market risk. Behind the scenes and undisclosed to investors, SocGen agreed through a swap to assume HP's payment obligation to investors. In return, HP got a replica of the simple bond issue it wanted: It's paying SocGen interest on \$100 million and will repay the principal at maturity. Industry sources figure the deal saved HP some \$100,000 off what it would have paid on a conventional note issue.

INCOGNITO OPTIONS. More than anything else, the HP deal illustrates the blurring of lines between debt and equity as swap dealers grow more innovative. Structured as a note but designed to perform more like a package of HP stock and put and call options, the new instrument exists in a regulatory limbo never envisioned by Congress when it drafted the Securities Exchange Acts in the 1930s. In fact, HP's issue was mar-

Rather than reducing risk, swaps may be 'introducing new elements of risk into the marketplace'

L. GERALD CORRIGAN
President, Federal Reserve Bank of New York



'Swaps perform a valuable function and allow a lot of people to manage interest-rate risks more effectively'

RICHARD L. SANDOR
Executive Managing Director
Kidder, Peabody & Co.

keted to fixed-income money managers who are required to stick to fixed-income investments but see more promise in equities, and to pension and mutual funds whose charters often prohibit them from owning options as too speculative.

The ability of swaps to leapfrog such artificial barriers is one reason equity-linked issues are now the swap market's fastest-growing products. But to some dealers, bonds offering an equity-market return are only the first step. In the past year or so, dealers have written as much as \$1 trillion worth of even more complex equity swaps—instruments that diminish even further the distinction between stocks and bonds.

Let's say a British pension fund wants to buy \$10 million worth of U.S. stocks but doesn't want to worry about fluctuations in the dollar's value. It could do a swap with Swiss Bank Corp.'s London office. At the end of every quarter, the fund would pay SBC the current interest rate on the sterling equivalent of \$10 million. SBC would pay the fund the total return on that \$10 million, invested in the S&P 500 and translated into pounds.

To hedge its risk and provide the promised S&P return, SBC might buy some or all of the stocks in the index, trade in futures, or do a little of each. Or SBC might attempt to match its obligation to the Briton against other swaps. The bank's New York office might do a swap with a U.S. customer who wants to

pay SBC the total return on \$10 million invested in the S&P and receive the return on an amount invested in German stocks. So the bank would turn the American's S&P payoff over to the British pension fund and then use the proceeds to construct another hedge to offset its obligation on German stocks.

"Why not just do the old way and buy stocks?" says Gary Gastineau, manager of equity-derivatives search for SBC. "Too so, the British fund would have to be able to trade and manage what's going on in three markets—British fixed-income, U.S. equities, and foreign

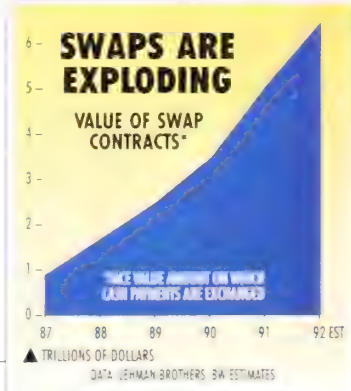
change. There are relatively few institutions that have that capacity."

WINDING ROAD. The complexity of swap deals is growing exponentially. Not long ago, one complex aircraft-finance swap involved 240 swaps before it wasanced out. "We look for the period of the hedge," says Morgan's Hancock. "It might take months, years, or more."

Hancock adds that he typically hedges much of the risk on a swap immediately after it closes. Nonetheless, lengthy chains of deals that swap dealers worry some critics. They think that if just one transaction comes unstuck, payments among dozens or hundreds of counterparties could be suddenly disrupted. "When you have all these funny instruments flying around, you have no idea what the real exposure is," observes Henry T. C. Hu, associate professor of the University of Texas Law School and a critic of financial regulation.

Many regulators are trying to address this issue. The European Commission is working on drafting tough new disclosure rules for swaps and other derivatives. By summer, the International

Organization of Securities Commissions at the Bank for International Settlements is expected to issue a first set of common capital standards for banks and brokerages engaging in swaps and other derivative transactions. In 1993, the Financial Accounting Standards Board will force swap dealers to more



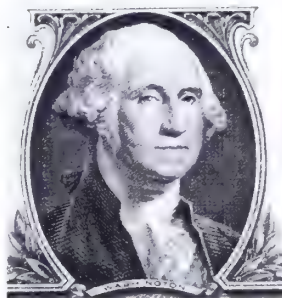
Over 80% of the most prominent figures in banking count on our computer solutions.

Throughout the world, bankers who speak dollars and bankers who speak yen and bankers who speak pounds, pesos, Deutsche marks, and francs, all speak to Unisys for answers to their mission-critical needs.

Forty-one of the world's 50 largest banks rely on Unisys information systems. And half the world's checks—40 billion annually—are processed on Unisys computers. But the luck hardly stops there.

Over 3,000 financial institutions depend on our systems for funds transfer. We've put our banking customers a year ahead of the competition in check imaging solutions. We offer unequalled capability in the revenue-generating area of branch automation. And we rank first in customer satisfaction surveys of markets as demanding as Japan.

So it's hardly surprising that 11 of Japan's top ten banks, ten of Europe's top ten, nine of America's



top ten, seven of twelve U.S. Federal Reserve banks, and 60,000 other distinguished customers recognize

Unisys as a world leader in mission-critical information systems.

A few more prominent figures: 1-800-448-1424, ext. 170. Ask how we can put the advanced technology and dedicated people of Unisys to work on your account.

UNISYS
We make it happen.

disclose unrealized gains or losses.

With regulatory pressure mounting and bank credit ratings falling as real-estate woes continue to mount, many swappers are growing more cautious. Increasingly aware that a swap that owes you money is no different than a loan, swappers are starting to demand that some counterparties put up collateral against balances due. Some are also re-

stricting their business to such highly rated banks as Morgan, Bankers Trust, and Union Bank of Switzerland. To keep up, Merrill Lynch and Goldman, Sachs & Co. have recently put \$300 million apiece into freestanding swap shops—units with their own AAA-rated balance sheets. Industry sources say Lehman Brothers is considering a similar move.

Fuller disclosure and more attention

to credit risk and capital may slow swappers. To many regulators, that's just fine. Even if Olympia & York problems have little impact, regulators and bankers now realize they must identify the globe-girdling swaps market against far larger threats that may come down the road.

*By William Glasgall in New York
Bill Javetski in Basel, Switzerland*

SCANDALS

THE JUDGMENT OF SALOMON: AN ANTICLIMAX

The SEC's 11-month probe fails to unearth massive fraud

To Securities & Exchange Commission Chairman Richard C. Breeden, it was a clear victory over Salomon Inc. In a settlement announced on May 20, the SEC won \$290 million in fines and damages against the Wall Street giant for violations of securities laws. The fine—second only to the \$600 million assessed against the former Drexel Burnham Lambert Inc.—“should send a clear message to potential wrongdoers that violations of the law in the government-securities market will not be tolerated,” Breeden declared.

But Breeden might want to think twice before putting the Salomon settlement front and center in his trophy case. Despite an 11-month investigation that took sworn testimony from more than 200 traders, the SEC didn't uncover much more than Salomon Inc. Chairman Warren E. Buffett publicly admitted last fall. Nor did the SEC unearth the widespread, massive fraud it apparently believed lay beneath the surface of the \$4 trillion Treasury market. While charges are still likely against former Salomon executives and other firms, Breeden admitted the probe “did not substantiate that wrongdoing is common, everyday, or systemic in this marketplace.”

BARE CUPBOARD. That conclusion strikes a clear blow at the SEC's ambitions to extend its reach more deeply into the \$4 trillion government-securities market. It bolsters the Treasury Dept. and the Federal Reserve, which argue that heavy-handed new regulations would drive up the rates the government must pay to

finance the national debt. “The cops kept going back to look for broader violations,” says a senior Fed official, “but they just didn't find anything.”

For Salomon, the settlement means its wrenching, yearlong ordeal could be over by Aug. 3—the date when Treasury and the Fed will lift their sanctions against the firm. The two months between now and Aug. 3, however, won't be easy: Salomon will be suspended from its coveted role as a primary dealer—one of the 38 select firms that trade

million reserve already set aside for liabilities and legal expenses. The firm faces about 50 lawsuits from investors and other dealers, alleging that Salomon's bidding violations allowed it to corner the market for specific Treasury securities. The SEC settlement includes \$290 million for a restitution fund for investors' claims. Litigants, though, may have a hard time making their case—since the SEC was unable to accumulate sufficient evidence that Salomon manipulated Treasury auctions. “That's what the whole case is about—collusion and manipulation—there's no mention of it in the SEC's complaint,” says a plaintiff's attorney. “It's like the dog that didn't bark.”

NO DEAL. While Salomon is off the hook with the feds, certain Salomon executives may still face government charges. Former chief government bond trader Paul Mozer, who the SEC says initiated 10 false bids in 9 Treasury auctions, hasn't yet struck a bargain with prosecutors to testify against his former

bosses, according to sources familiar with the talks. That could mean Salomon was unable to produce damaging evidence against his superiors, says a former CEO John Gutfreund, who resigned after revealing that he had known of Mozer's bid manipulations for four months before informing regulators. Gutfreund is currently cussing with the SEC over whether any civil charges will be brought. The absence of a Mozer deal with the feds may also indicate

THE SCANDAL'S COST TO SALOMON

- ▶ **\$122 MILLION** in SEC penalties for civil securities law violations: submitting false bids in Treasury auctions; creating false books and record-keeping; failing to state facts in press release and registration statement; trading to create fictitious tax losses
- ▶ **\$68 MILLION** in forfeitures and payments to Justice Dept. for settlement of antitrust and other claims
- ▶ **\$100 MILLION** for a restitution fund for payment of private damage claims. Unclaimed amounts revert to Treasury
- ▶ **TWO MONTHS' SUSPENSION** of primary dealership. Firm banned from trading with Fed Open Market Desk June 1-Aug. 3

DATA: JUSTICE DEPT., SECURITIES & EXCHANGE COMMISSION, FEDERAL RESERVE

securities with the New York Fed. Besides costing Salomon perhaps \$4 billion in trading volume, the suspension will bar the firm's economists and traders from daily contact with the Fed's Open Market Desk. Without that intelligence on the Fed's plans to raise or lower interest rates, Salomon's bond traders will be at a competitive disadvantage.

The financial hit to Salomon is substantial but manageable. Buffett announced on May 20 that the firm would take a \$185 million pretax charge-off in the second quarter—to add to the \$200

million that Mozer hasn't been able to substantiate with material evidence implicating other government securities firms. Mozer's lawyer could not be reached for comment.

The May 20 agreement closes a chapter in the life of Salomon. By clearing clean with both investigators and customers, Buffett kept the firm afloat. But after nine months under fire, Salomon still faces the huge challenge of rebuilding its badly damaged business.

By Mike McNamee and Dean Fortin in Washington, with Leah Nathans in New York



Security Defined

Defined Funds are unit investment trusts that can help define security. For you, and your clients. These diversified portfolios of stocks or bonds are professionally selected. Your clients will know what they're investing in before they buy. Which can help bring peace of mind. And to assist you in explaining Defined Funds, we'll give you copies of Definitions, a magazine that explains further. Call 1-800-422-9001, ext. 358.

Merrill Lynch

Shearson Lehman Brothers • Prudential Securities • Dean Witter • PaineWebber
free prospectus containing more complete information on any Defined Fund, including all charges and expenses, is available. Read the prospectus carefully before investing.

BEWARE THE TURN OF THE SCREW

When convertibles are redeemed, the fine print can cost investors

It was a dishwasher-dull pronouncement from that most prosaic of companies, Pep Boys. (Manny, Moe & Jack). Early in April, the Philadelphia-based auto-parts chain announced that on May 7 it would redeem all of its \$75 million in 6% convertible-subordinated debentures. But buried amid the financial minutiae was a bombshell: Holders of the debentures were about to lose six months' worth of interest, totaling a cool \$2.3 million.

Investors in Pep Boys convertibles had fallen victim to one of the most expensive phrases in the English language—the "early conversion expiration" provision. Or, as it is not so affectionately known among the few investors who have heard of it, the "screw clause." It's an innocuously worded technicality that is obscure enough to escape the attention of even the most sophisticated investors in convertible securities.

Screw clauses can be invoked legally to deny investors in convertibles an entire interest payment, which can mean as much as half a year's interest. True, Pep Boys is the only issuer known to have recently invoked a screw clause in a way that resulted in investors missing an interest payment. But the Pep Boys imbroglio is likely to be repeated in the future, because the screw clause is becoming standard language in bond covenants. According to McMahan Securities Co., a Greenwich (Conn.) firm that specializes in convertibles, screw clauses can be found in at least 15 recent convertible debenture and preferred stock issues (table). "The [screw clauses] haven't been around in a while, but you see them reappearing in prospectuses," notes Thomas Revy, managing director of Froley, Revy Investment Co., which manages \$600 million in convertible securities. "I think it's a case of attorneys and MBAs trying to earn their keep."

MAYDAY. Screw clauses only become a problem for investors when their convertibles are about to be, well, converted. As their name implies, convertibles are hybrids—part bond, part stock. They pay a set rate of interest but can be converted into common stock at a specified price—which usually is significantly higher than the share price at the time

the convertible is issued. That gives the investor an income stream and also a stake in the company's share price. If the share price rises so that it becomes profitable to convert, the issuers frequently call the convertibles for redemption—in effect, forcing the investors to convert their shares. (If they don't change their convertibles into shares, they receive a payment that is usually less than the value of the shares.)

The companies benefit from such con-



COMPANIES THAT HAVE RECENTLY ISSUED 'SCREW CLAUSE' SECURITIES

Issuer	Issue size Millions of dollars
[REDACTED]	\$30.0
[REDACTED]	35.0
[REDACTED]	52.5
[REDACTED]	100.0
[REDACTED]	60.0
[REDACTED]	90.0
[REDACTED]	805.0
[REDACTED]	100.0
[REDACTED]	70.0
[REDACTED]	230.0
[REDACTED]	200.0*
[REDACTED]	200.0
[REDACTED]	50.0

*Two separate issues of \$100 million each

DATA: McMAHAN SECURITIES CO.

versions because they replace debt with equity. The investors gain from the increased price of the security. But in the case of Pep Boys, the clause resulted in the loss of an entire interest payment.

The Pep Boys screw clause was simple enough: "In the case of debentures called for redemption, the conversion rights will expire at the close of business on the fifth business day prior to the redemption date." This provision made it easier for Pep Boys to handle all the paperwork prior to redemption—and it had another effect. In this case, the redemption date was May 7. The fifth business day before May 7 was Apr. 30. And, as it happened, one of the two interest payment days in 1992 was May 1.

A coincidence? Pep Boys officials would not return repeated phone calls from BUSINESS WEEK to discuss the timing of the redemption. Whatever their motivation, even the most vociferous critics of the screw clauses concede there is nothing illegal about them. It's an instance of ignorance not being bliss. "Most investors don't even know [screw clauses] are in there, and most companies don't know about them either," observes Michael F. McNulty, co-director of research at McMahan.

CAVEAT EMPTOR. If investors haven't stumbled upon the screw clauses, it's because they haven't been looking. One manager of a large mutual fund that invests in convertibles, who asked that his name not be used, admits that he has not exactly been keeping an eye peeled for such things. "I really haven't focused that much, to tell you the truth on the screw clauses," says the manager. "It may be a case of 'buyer beware' but I would put the onus on the underwriter as well."

But what about the issuers? Corporate officials can wipe out screw clauses with the stroke of a pen—and one company, Cincinnati Financial Corp., did just that, after its convertible's preliminary "red herring" prospectus drew complaints from investors. Even if a company has a screw clause, it may not necessarily be used to penalize investors. Home Depot Inc.'s chief financial officer, Ronald M. Brill, insists that the company would never use its screw clause to escape an interest payment if it redeemed its recent \$805 million convertible issue. If investors had insisted, he says, the screw clause would probably have been eliminated. Observes Brill: "It's certainly not something worth fighting over, if you don't plan to stick it to investors. But investors never even asked. So if they ever find themselves at the receiving end of a 'screw clause,' they have no one to blame but themselves."

By Gary Weiss in New York

Lufthansa now has a way to shorten your trip that has nothing to do with speed.



The new Lufthansa Business Class

Our new concept in Intercontinental Service.

We invested over \$40 million and 18 months to develop it. And with the help of our flight attendants, chefs and passengers, we created a new concept in service for Lufthansa Business and First Class. It's designed to lavish the most individualized attention on every passenger. It offers unsurpassed comfort that can make your flight go by that much quicker. For instance, you'll have the same flight attendant from your welcome drink generally to your last snack. And in Business Class,

you may need his or her suggestion on our new menus with dishes so delicious that our cuisine was admitted into the elite "Chaine des Rôtisseurs." In First Class, our new personalized service means a real buffet breakfast. And on our 747s, a luxurious upstairs cabin redesigned exclusively for you. So in Business or First Class, you'll find our European standard of elegance at a new level — one that will show you time does fly when you're flying. The Lufthansa Intercontinental Service. A passionate beginning to a new era in flight.

A passion for perfection.SM



Lufthansa

For more information and reservations call 1-800-645-3880 or see your Travel Agent. Lufthansa is a participant in the mileage programs of United, Delta, and USAir.

BY GENE G. MARCIAL

A TUG-OF-WAR OVER THE MAKER OF DIRT DEVIL

Shareholders of Royal Appliance Manufacturing are feeling less than confident these days. The stock has been beaten down to as low as 37 a share on May 15 from a high of 59 in February. An enormous tug-of-war is raging between the shorts and the longs. The Feshbach brothers have a major short position in Royal, insist some pros. So far, the shorts have the upper hand, but a snapback could well be in the making, with the stock edging up to 41 in recent days.

Royal's stock was hot when it first went public last Aug. 6 at 15½ a share. The new issue zoomed to 35 in just a month. It kept on going until mid-February when the shorts, betting that this maker of vacuum cleaners wouldn't be able to sustain its fast rise, put pressure on the stock. Royal's loyal fans, spearheaded by Goldman Sachs analyst Dan Carasso, explains that a spate of rumors is hurting the stock.

POOR RATINGS. One rumor: An unnamed big customer had returned a shipment of defective Royal products worth \$20 million. "Not true," counters Carasso, who says he had checked with management several times. What's true, he explains, is that Wal-Mart Stores had returned in the fourth quarter unsold Royal products worth \$5 million to \$10 million, which had been fully expensed in the fourth quarter of 1991. In fact, adds Carasso, "Wal-Mart, enthused by the success of Royal's *Dirt Devil* upright and hand vacuum cleaners, this year ordered three additional Royal products, including the new \$99 upright vacs, which are off to a good start." Royal has shipped the new vacs to other major customers such as Kmart and Target. Carasso sees a sharp acceleration in earnings immediately following the June advertising blitz for the \$99 vacs.

Another rumor that Carasso pooh-poohs: A consumer-products magazine will come out with the results of a survey of vacuum cleaners in which Royal did relatively poorly. He says this isn't news because certain Royal products in the past have been rated poorly in the magazine's surveys, but sales haven't been adversely affected.

One pro who has been shorting the

ROYAL APPLIANCE IS EATING DUST



stock, however, says that the intensifying competition in the business will "deliver a stunning blow to Royal." Rich Vasek, Royal's controller, says rivals haven't "had any significant impact on us, and we haven't seen any change in the competition."

Smith Barney analyst Joe Kozloff is also high on Royal. He figures that the new product alone could produce sales of \$30 million in 1992 and \$50 million to \$100 million in 1993. Total sales in 1991 came to \$273 million. Carasso, who expects Royal to earn \$2.80 in 1992, vs. 1991's \$2.17, believes the stock will hit 60 in 12 months. "Even at that price, Royal is cheap," he says, based on his 1993 estimate of \$3.60 a share.

CHAMPION: ABOUT TO BE A CHAMP?

Money manager Eric Kuby isn't upbeat at all on the market, so he has been extremely careful in picking stocks for the \$100 million portfolio of Rodman & Renshaw Capital Group, of which he's chief investment officer. Kuby searches for the unpopular but undervalued company with hard assets—and little Street following. One of his first picks this year, Universal Matchbox Group, ended up being taken over recently by Tyco Toys, at 10¼ a share. The stock was trading at 5 in March when it caught Kuby's eye.

So what's his next big winner? Kuby thinks it will be Champion Parts, a major rebuilders of auto and truck parts. Kuby believes the risk in the stock is very low. It's trading at 37½, with a book value of 8 a share. The company

posted an 18¢-a-share loss last year because of nonrecurring costs arising from a restructuring and early retirement of subordinated debt. But with the economy recovering, Kuby expects Champion to earn 35¢ a share this year and 60¢ next year.

Kuby thinks the company is a juicy takeover target. One big shareholder is Echlin, the major auto parts maker. Echlin owns 16.5% of Champion. Some investors are betting that Echlin will make a move on Champion. Other industrial companies may be interested in Champion as well, says Kuby. He figures the stock is worth at least 8 a share based on the earnings turnaround alone. A Champion spokesman declines comment.

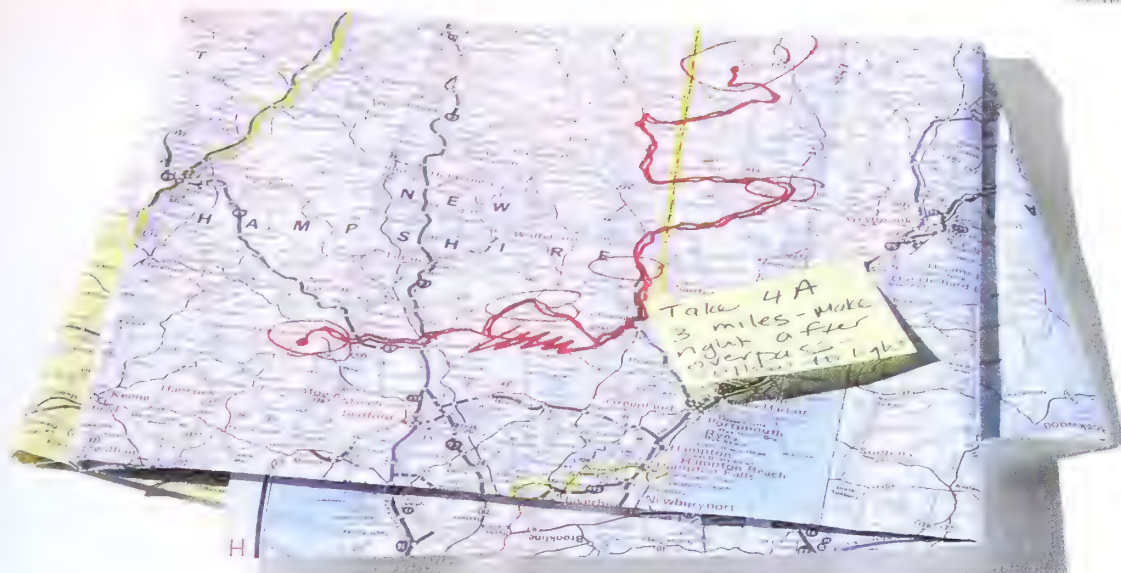
MEGO TRIES ON A FINANCE HAT

For a small company that's in the time-share and land-development business, Mego has collected an array of savvy investors, including financier Bob Nederlander, a minority partner in the New York Yankees, and Wilbur Ross Jr., a restructuring neer at Rothschild Inc. The success of the toy company Mego International, which went into Chapter 11 in 1991, the new Mego is currently trading at 1½ a share. Some pros are betting that Mego could be worth 5 a share in about two years, based on Nederlander's plans for Mego.

The primary objective of Nederlander, who is chairman and CEO, is to convert Mego into a financial-services company. President Jerry Cohen says the company is on the prowl for acquisitions in the consumer-finance business. Mego changed its name in May to Mego Financial.

John Boland, editor and publisher of the newsletter *Bankruptcy Values*, believes that even before any acquisitions, the company will earn 25¢ a share in the year ending Aug. 31, 1992, and 30¢ in fiscal 1993. Depending on what acquisitions are made, profits could be much higher next year, he says.

One investor believes the company's first acquisition will be a mortgage banking company, with operations in more than a dozen states. He says a deal is very close to being done. If that comes to fruition, he says, it will increase revenues of about \$25 million to a total of \$46 million. Earnings, as well, would increase significantly, says this investor.



Getting from point A to point B

Anyone who travels on business knows how hard it can be. Which is why we've made getting AT&T so easy. Even at public phones

isn't always easy.

that aren't automatically connected to AT&T.

If you're calling long distance and you don't hear "AT&T" after the bong, simply hang up.

Getting AT&T is.

Dial 10+ATT+0 (it's right on the back of your AT&T Card). You'll be assured of the service you depend on, at the prices you expect

Dial 10+ATT+0

plus the area code and number.



LIFE ON THE FRONTIER AT TIME WARNER

The company's new multimedia ventures are in the hands of three men. Can they move fast enough?

Geoffrey W. Holmes winces painfully at the memory of his first brush with the multimedia world. It was December, 1982, and the Atari Corp. subsidiary of Warner Communications had flooded stores with a new video game based on the hit movie *E.T.* But the video game craze was fading, and Atari was left with warehouses of

R. Patrick, former chairman of the Federal Communications Commission, and Robert W. Pittman, the media entrepreneur who helped create MTV. With the furor over Warner's 1990 merger with Time Inc. subsiding, the spotlight has swung to these ambitious executives.

It has fallen to them to realize the lofty promise Chairman Steven J. Ross

to Time Warner. Though he won't comment on IBM, Holmes says he wants to revolutionize television viewing by signing up Time Warner's cable system to computer software. Holmes is no techie. Before joining Warner in 1980, he managed money for financier Saul P. Steinberg. But the Atari collapse taught him a critical lesson: "You can make



GEOFFREY W. HOLMES

Senior Vice-President, Time Warner Inc.

AGE: 46 **EDUCATION:** BS, Colorado State University

JOB DESCRIPTION: Develop new cable-TV technologies and strike alliances with technology companies such as IBM



DENNIS R. PATRICK

Chief Executive, Time Warner Telecommunications

AGE: 40 **EDUCATION:** BA, Occidental College; JD, UCLA

JOB DESCRIPTION: Develop mobile telecommunications services using Time Warner's cable network

unsold games. News of the debacle cut Warner's market value by 32% in one day. As head of investor relations, Holmes had the unenviable task of telling Wall Street what went wrong.

Ten years later, Holmes has a more welcome assignment. He is one of three key players in Time Warner Inc.'s effort to establish new businesses using its resources in entertainment, publishing, and cable TV. The other two are Dennis

made in selling the merger: that Time Warner would become a global multimedia empire. To do that, he said, Time and Warner would link their properties in movies, cable TV, publishing, and recording. The company would also forge alliances with technology companies in Europe, the U.S., and Japan.

Holmes, for example, is talking to IBM about forming an alliance with the computer giant, according to sources close

business decisions because you get mesmerized by technology," he says.

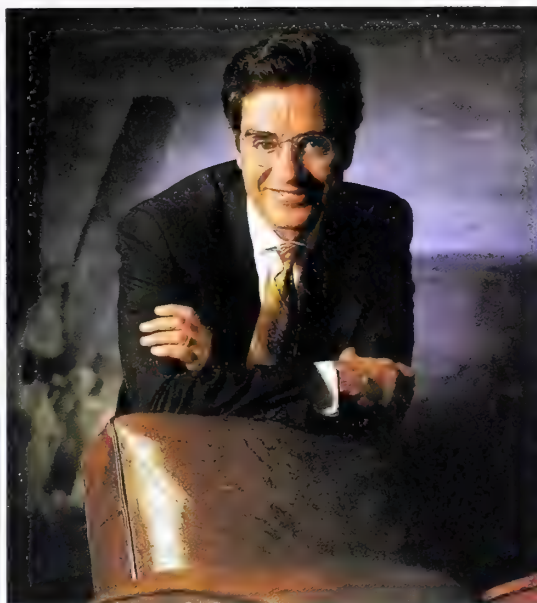
Patrick and Pittman, meanwhile, are searching for other synergies at Time Warner. Patrick is spearheading a new push into the mobile telecommunications business, a venture that will make use of the company's strengths in cable TV and marketing. Pittman is in charge of Time Warner's stable of film and television characters to rejuvenate the

gs amusement park chain, now
-owned by Time Warner.

All three are protégés of Ross,
o has given them broad man-
es. But synergy is hard work:
ey must persuade Time Warner's
y and fiercely independent divi-
n heads to support projects that
y not pay off for years. Publish-
Chairman Reginald K. Brack Jr.
s he devotes less than one hour
eek to new media ventures, even
ugh he is a firm believer in
m. And Ross's vaulting vision
raised daunting expectations.
e outside world is looking for us
do some gigantic thing," says
mes. "I just don't know how you
something that big."

KEYS ON DEMAND. Not that
mes's vision is cramped, exactly.
wants to make Time Warner's
le-TV system an interactive path-
through which the company
send and receive reams of infor-
mation. By pressing buttons on a
ote-control keypad, cable sub-
scribers would be able to order a
mer movie or a video version of
Time-Life home-improvement
k on demand. One key is adding
working technology that in-
sures the amount of information
can be transmitted through the
e. That's why Holmes is talking
\$M and other computer companies.
e confirms that he wants a technol-
company to buy an equity stake in
e Warner's cable-TV and entertain-
t properties. Such a deal would be
lar to the \$1 billion strategic alliance
e Warner struck last fall with Ja-
s Toshiba Corp. and C. Itoh & Co.
bankers say the IBM talks involve a
ler deal than the Japanese alliance,
which the partners bought 12.5% of
e Warner's entertainment assets.
Holmes delights in showing prospec-
partners the world's first 150-chan-
cable system, which Time Warner
is installing in Queens, N. Y., last
e. With its fiber-optic cables, the sys-
is a laboratory for the interactive
ices that Time Warner hopes to of-
fer. For now, the system offers only
ed interactivity to 3,000 subscribers.
the company plans to upgrade the
ice and expand the system to
100 subscribers by 1995.

Colleagues say Holmes is a deft sales-
man who has broad contacts and an
ability for dealmaking. He also has the
of Time Warner's top brass: He says
he speaks to President Gerald M. Levin,
a longtime proponent of interactive TV, a
few times a day. But media experts
say that Holmes must win over a far
larger group: consumers. "I've seen no
concrete evidence that there is pent-up
demand for these services," says Samuel



ROBERT W. PITTMAN

Chief Executive, Time Warner Enterprises

AGE: 38 **EDUCATION:** Attended various
universities, Harvard management program
JOB DESCRIPTION: Develop new businesses,
including theme parks, using Time Warner's
entertainment and editorial assets

H. Book, an analyst at communications
consultants Malarkey-Taylor Assoc.

Dennis Patrick has also emerged as a
key figure because of his Rolodex. As
former FCC chairman, Patrick knows
how to approach the government for ac-
cess to the radio spectrum. That's in-
valuable, since Time Warner's plan to
get into telecommunications depends on
winning licenses out of the FCC. Col-
leagues describe Patrick as a headstrong
policymaker, who led the drive to over-
turn the Fairness Doctrine while at the
agency. "If you don't understand him,
his reputation may be one of arro-
gance," says James Quello, an FCC com-
missioner who worked with him.

Patrick's latest project is characteristi-
cally bold: He wants to build a wireless
telephone service that competes with cel-
lular. Time Warner would sell its cus-
tomers a portable phone that they could
use to communicate with anyone, any-
where. Patrick says the technology,

called Personal Communications
Networks, will be cheaper than cel-
lular because PCN phones send and
receive a lower-power signal. Time
Warner would make up for the loss
in range by relaying the PCN signals
over the unused portion of its cable
wires. Time Warner has installed
experimental PCN technology in its
cable system in St. Petersburg, and
Patrick is asking the commission for
preferential treatment as a pioneer
in PCN when it begins awarding li-
censes sometime in 1993.

HARD SELL. So far, telecommunica-
tions experts are chary of Time
Warner's plan. In a survey, Jerry
Kaufman, an analyst at Alexander
Resources, found that few consum-
ers thought PCN would be of much
use except when regular phone ser-
vice breaks down. Even Patrick con-
cedes it will be a hard sell: "I'm
creating an industry that doesn't ex-
ist. This is *Star Trek* time."

While Patrick quietly works the
FCC, Bob Pittman is out to make
some noise. He wants to turn the
lumbering Six Flags amusement
park chain into a rival of Walt Dis-
ney Co. Six Flags generates \$100
million in cash flow, but profits still
lag behind those of Disney and oth-
ers. Time Warner has invested \$50
million over the past two years to
buy a 50% stake. Pittman now spends
most of his time running the unit.

The trouble is, Six Flags lacks Dis-
ney's brand image. So Pittman is fas-
hioning a new image by drawing on Bugs
Bunny, Yosemite Sam, and other
Warner Brothers characters for rides,
merchandise, and ads. He just unveiled a
new roller coaster called Batman The
Ride, at the park in Gurnee, Ill., to capi-
talize on the June 19 release of Warner's
Batman Returns. Pittman doesn't hesi-
tate to put a dollar value on his brand of
synergy: He says he can boost Six
Flags' cash flow by almost \$50 million
through increased concession sales.

If Holmes and Patrick are more reti-
cent to estimate a payoff than Pittman
is, it's because their projects are still in
nascent stages. The two also tend to
keep a lower profile than Pittman. In-
deed, some company insiders say Pitt-
man's brash style has alienated some of
Time Warner's powerful division heads.

For his part, Holmes insists he would
be happy just to add 1% to Time
Warner's \$12 billion in revenues and
trim 1% from its \$10 billion in costs.
"That's synergy," he says. Maybe so.
But Steve Ross's synergy squad will
have to turn their multimedia dreams
into real money before they live up to
the boss's grandiose plans.

By Mark Landler in New York, with Mark
Lewyn in Washington, and bureau reports



'I'M CREATING AN
INDUSTRY THAT DOESN'T EXIST.
THIS IS *STAR TREK* TIME,' SAYS
PATRICK OF HIS ASSIGNMENT



EDITED BY AMY DUNKIN

France

LANDSCAPE WITH BIKE AND RIDER

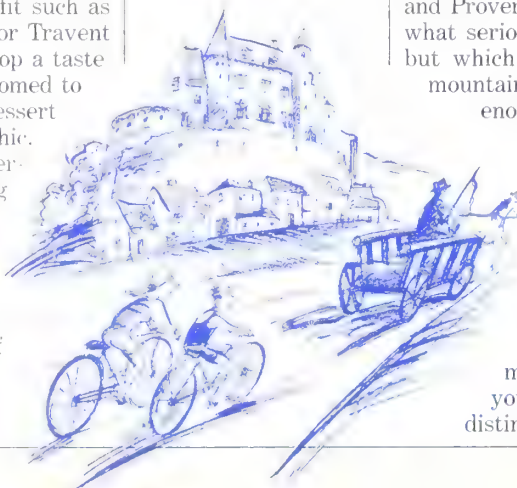


No one was forcing me to bike up Mont Ventoux. The 6,000-foot ascent wasn't part of the day's program. In fact, some cyclists in our group had elected

to skip riding altogether and go shopping instead on our last day in Provence. But I, along with a half-dozen other hardheads, decided to head for the summit. Two sweaty hours into the climb, however, I found myself wondering why.

Was it penance for the industrial quantities of goat cheese and duck confit I'd been eating? Was it to sharpen my taste buds for the well-cellarred Hermitage I'd promised myself for that night? Or was it simply a lark?

INDULGENCE. While bicycling through Europe, at least if you travel with a high-end outfit such as Butterfield & Robinson (800 678-1147) or Travent International (800 325-3009), you develop a taste for sleeping in castles. You grow accustomed to three-hour dinners with wines and dessert spreads that border on the pornographic. You get spoiled by hopping onto a perfectly maintained bike while carrying nothing but a fanny pack, serene in the knowledge that your luggage will appear magically at the next chateau. And best of all, you wallow in all this luxury while feeling downright virtuous. After all, there's lots of exercise. And culture: You see churches, ruins, and markets. You speak French.



It is this happy combination of wholesomeness and indulgence that makes European bike-touring one of the fastest-growing travel trends of the past decade. Eight-day bike trips with B&R Travent cost roughly \$2,500 a person and include hotels and most meals but not airfare.

The favorite destination for pedal-pushing Americans remains France. The reasons are simple: France has a great network of well-maintained country roads, a tradition of gracious private hotels, beautiful scenery, oodles of historic architecture, and food and wine to die for. It is also a felicitous fact that France has a lot of flat stretches.

Not that I seemed to find many of them on my rambles through the Dordogne (with Butterfield & Robinson) and Provence (with B&R). No, I kept running into what serious bikers refer to as "rolling country," but which the rest of us might call hills. Mountains, mind you, but inclines pronounced enough to put you in touch with the truth of gravity. High enough to give you a panorama from the summit and a prodigious appetite for the next *gavage*. (Literally, *gavage* is the force-feeding of geese to produce foie gras. But it might also be applied to the eating habits of people who've been pedaling for hours.)

In any case, French hills come in many varieties, and the more often you pedal up, the more vivid become the distinctions. There are the gradual, out-



ng slopes beloved of vintners—bejeweled with
le grapes peeking out from under blue-green
es. There are the hills like upturned bowls fad-
ed by shepherds, with their lamb-nibbled car-
as neat as golf greens. There are the more
ed hills of Languedoc—seemingly haphazard
of dry white rock with herbs and wildflowers
ng out of every crevice. Then, there are hills
want no part of, majestic but daunting
ontories you contemplate from afar.
the Dordogne, the impetus for climbing hills
ten a desire to see the region's extraordi-
prehistoric sites. The painted caves of
aux (actually Lascaux II, a meticulous repro-
tion, built because air and tourists were caus-
irreversible damage to the original) demon-
ce that Cro-Magnon man was not only a
isticated artist but also someone with the
e—and the stamina—to seize the pro-
d high ground for his shrines.

hile little is known of the eating
s of prehistoric Frenchmen, hearth-
es found at sites such as Roc St.
stophe strongly suggest that food
aration was a Dordogne priority from
tart. What's certain, however, is that
day's Dordogne, cuisine is a magnifi-
obsession at the very heart of red
identity and pride.

DUCKY. In contrast to the butter-
l cuisine to the north and the olive-oil
l cooking to the south, the food of
ord is built around the headily unc-
fat of ducks and geese. From leeks
utlets to lettuce, nearly every food is
ured with some essence of well-insu-
bird. If you think that sounds rich,
e right—especially when you factor
e almost hallucinatory truffles, the musky
(wild mushrooms), and the habit-forming
goat-cheese disks known as cabecous.

Provence, the hilltop attractions have more
with the Romans—both the ancient ones,
made southeast France their own, and the
eval ones, who established a papacy in

COUNTRY PEDALING
SCENES ALONG
FRANCE'S NETWORK
OF WELL-PAVED,
BACK ROADS
(FROM TOP LEFT):
LAVENDER FIELDS
OF PROVENCE,
DESERTED FARM
VILLAGES,
A WEALTH OF
MEDIEVAL
MONUMENTS, AND
CAVE DRAWINGS
AT LASCAUX



Avignon, thereby assuring the region of prosper-
ity, assassinations, and religious wars. On the as-
cent to Les Baux, a macabre ghost town perched
on a solitary stub of mountain, there is ample
time to reflect on how quick the trip down must
have been for the heretics pitched over the sheer
edge by Raymond de Turenne, nephew of Pope
Gregory IX.

If Les Baux inspires fretfulness, Châteauneuf-
du-Pape inspires mostly thirst. The insinuating
aroma—part grape juice, part dirt, part woody
exudation reminiscent of root beer—fosters an
urge to drink the output of the local vineyards.
And there is no better place to do this than the
Pope's patio—the stone courtyard that fronts the
remains of the papal summer cottage from which
the village draws its name.

ROOM AT THE TOP. The final ascent of most days
carries a different motivation—since it's
usually the climb to the hotel: Many of
Europe's oldest and most beautiful villages
sit on hilltops. And many of life's pleasan-
test hotels are in those villages. It takes
legwork to reach them, yet people soar
up the steep approaches on wings of ex-
pectation—of a hot bath, a basket of fruit,
a split of champagne from the mini-bar.

There's one more motivation that carries
bicycling bodies heavenward: It is motiva-
tion-for-the-hell-of-it. Which brings us back
to Mont Ventoux. At the beginning of that
ascent, I told myself I was doing it for
the view of the fertile valley that stretched
away in purple and gold. But the wind
came up, the clouds descended, and the
view disappeared. I had 10 kilometers to
go and could no longer kid myself that I
had a reason for going.

But it was perfect. Innocent of the hope of
gain, the climb was pure...well, pure climb.
Pointless? Sure. But I would submit that anyone
who has lost sight of the pleasure of that kind of
gratuitous challenge is badly in need of a bicycle
trip in rolling country.

By Laurence Shames



Spain

OFF THE OLYMPIC TRACK IN CATALONIA



If you're planning to go to the Olympics in Barcelona this July and want to escape from the hustle and bustle of the city, some of Spain's loveliest vistas—and one of the world's tiniest countries—are within a few hours' drive. So are the Dali Museum, an excellent collection of Romanesque architecture, and an assortment of medieval monasteries—some of which take overnight guests.

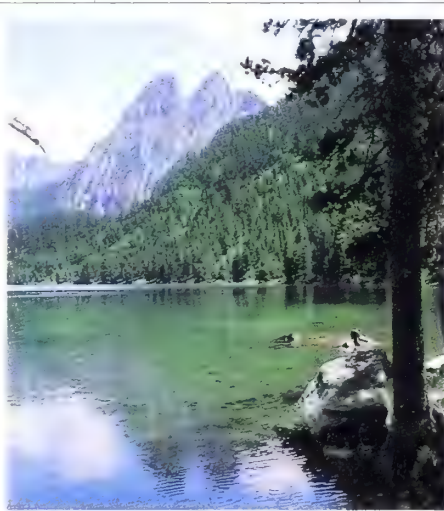
You can rent a car for these excursions, of course. But if you prefer to let someone else do the driving, there is hardly a village, however remote, that's not reachable by bus. Information and schedules are available at the Catalan Tourist Office, Gran Via de las Corts Catalanas 658, Barcelona (3-301-7443).

The Dali Museum at Figueras, 86 miles north-east of Barcelona, contains the most complete collection of works by the late master of surrealism. An upended Cadillac on a column forms the centerpiece of the entrance patio of this bizarre-looking structure, which includes Dali's final residence—the pink-stucco Torre Galatea. Figueras is also famous for regional dishes such as stuffed apples and Ampurdán cheese, and fresh fish is available from the nearby Costa Brava. The abundant menu at the Ampurdán, a local shrine of gastronomy, will set you back about \$40.

MIDDAY MUSIC. As you wander through the Pyrenees, you will—in village after village—come upon beautiful churches and monasteries, generally more than 1,000 years old. Several outstanding ones are in and around Ripoll: the 9th century Santa Maria monastery with



BEYOND BARCELONA
THE ROAR
OF THE SUMMER
GAMES WON'T BE
HEARD AT THE
MONASTERY OF
MONTSERRAT
OR IN AIGUAS
TORTES NATIONAL
PARK



its 12th century doorway showing Biblical scenes carved in stone; San Pedro Church, with its collection of ancient arms; San Juan de las Abadesas, where a 12th century sculpture depicts Christ's descent from the cross; and Queralt, a 12th century Romanesque church near Nuria.

If you want to stay overnight, you could find a more scenic location than the Sanctuary of the Mother of God at Nuria, 1½ hours north of Barcelona by way of Ripoll. The monastery sits on the slopes of the 9,555-foot Puigmal mountain, a base for skiers and hikers. It has a bar, a reasonably priced restaurant and, of course, a chapel. A comfortable room for two costs about \$75.

The spiritual heart of Catalonia is a small town where a statue of the Virgin enshrined at the 11th century monastery of Montserrat, near the crest of a row of saw-toothed mountains three-quarters of an hour northwest of Barcelona. The renowned Escolania boys' choir sings daily at midday.

SMUGGLERS' DEN. Another worthwhile side trip is to the principality of Andorra, an independent nation for more than 700 years—with an area half as big as the five boroughs of New York City and a population of 60,000. Its capital, Andorra la Vella, is two hours northwest of Barcelona by way of the town of Seo de Urgel. Formerly a duty-free shoppers' paradise, a skiers' mecca and a smugglers' den, Andorra is trying to regain its status as a tax haven—since the European Community has wiped out customs barriers between France and Spain. It is still a good place to buy gourmet items such as cheese from the Pyrenees, paté, honey, and French wine.

Collectors of geographical curiosities might enjoy Llívia, a Spanish town that has been surrounded by France since the 17th century. It can be reached from Andorra through the Enllos Pass or from Barcelona via Puigcerdà. The town, with a population of 828 inhabitants, with pre-Roman origins, claims to have the oldest pharmacy—now a museum—in Europe, founded in 1415. The three-star Hotel Llívia, open only in summer, runs for \$71 for a double. Good local cuisine at La Can Ventura costs about \$35 per person.

If you appreciate wildlife, Espòt is the place for you. This town three hours from Barcelona overlooks the lovely, wooded Espòt Valley with

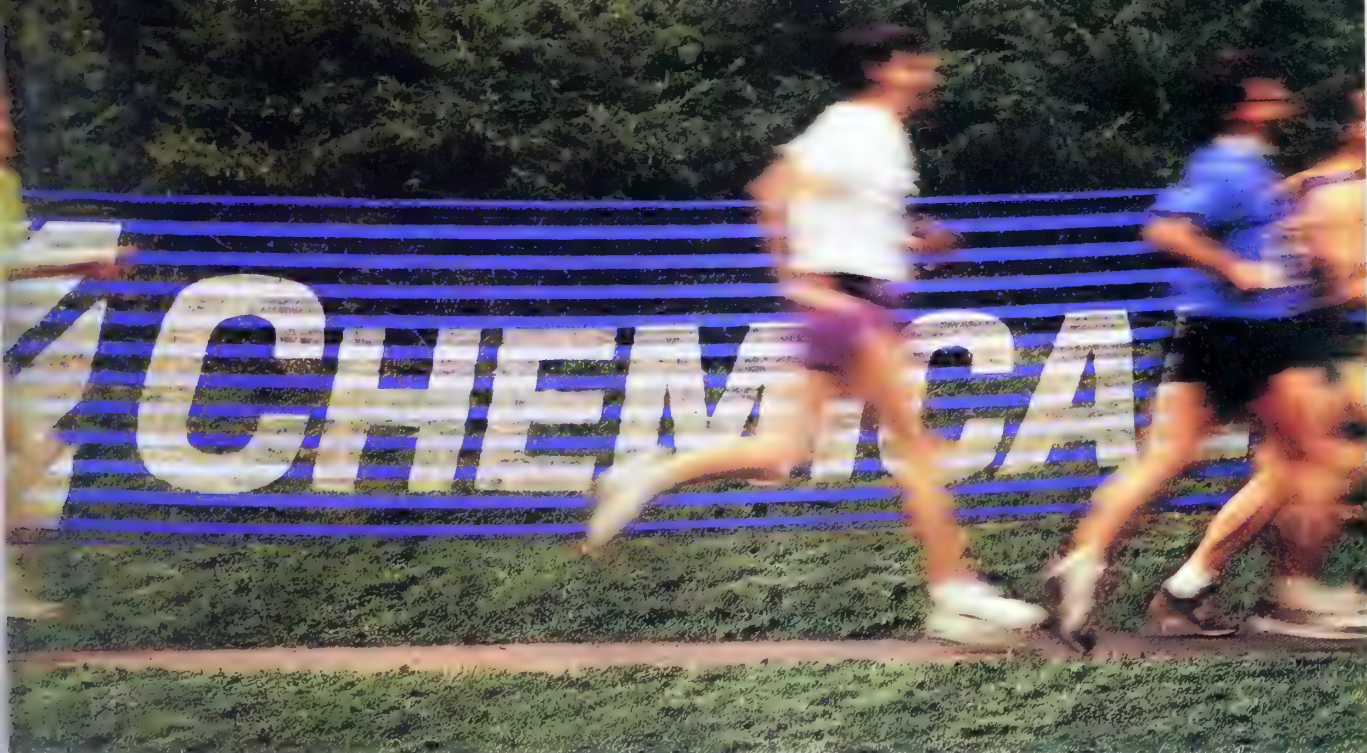
its many brooks and lakes, and is close to the 54,000-acre Aiguas Tortes National Park. The game includes chamois, wild boars, and the rare partridge. The Pension Sant Mauri offers \$55 rooms with bath and a view.

Even closer to Barcelona is the Penedès wine-growing district, which produces most of the grapes for Spain's answer to champagne. The wineries offer guided tours of the vineyards. One of them is Segura Viudas, the town of San Sadurn de Noya.

After touring the vineyards, you can learn about the history of wine-making at the Wine Museum in Vilafranca del Penedès, a half hour west of Barcelona. And when the lesson is over, museum-goers get a chance to sip some wine.

By Harry Drell

SHOW THE WORLD YOU'RE A WELL-RUN COMPANY.



By entering a team in the Chemical Bank Corporate Challenge®, you'll not only be promoting physical fitness, but a sense of pride and achievement in your company. This 3.5-mile race is open to full-time employees of corporations, businesses and financial institutions in each of the cities listed below.

Now in its sixteenth year, the Corporate

CHEMICAL BANK CORPORATE CHALLENGE®



Challenge has grown to become the largest event of its kind. Last year, over 112,000 runners from 5,200 companies competed.

So foster a spirit of teamwork within your company that transcends the balance sheet. For more information, write or fax: Event Marketing, Chemical Bank, 140 East 45th Street, 16th Floor, New York, N.Y. 10017. Fax: (212) 557-3799.

SCHEDULE OF EVENTS

4 New York City (Race 2)	July 23 Los Angeles	August 11 Stamford	October 3 New York City—
24 New York City (Race 3)	July 28 East Meadow, Long Island	August 12 Paramus	International
30 Philadelphia	July 30 Morristown	August 13 Boston	Championship
9 Buffalo	August 4 Syracuse	September 16 Atlanta*	
15 London	August 6 Chicago	September 23 Dallas	

Chemical Bank Corporate Challenge® Series, previously known as the Manufacturers Hanover Corporate Challenge Series, is held in cooperation with the following sponsors:

*The Corporate Challenge® event in Atlanta will be held under the name of Georgia Federal Bank pursuant to a licensing agreement with Chemical Bank.

The New York Times **NEW YORK Marriott EAST SIDE** **BusinessWeek**
AA American Airlines *Brooks Brothers*

CHEMICAL

Switzerland

A PEAK EXPERIENCE



It proved to be a stubborn foe; it resisted long, and gave many a hard blow; it was defeated at last with an ease that none could have anticipated, but, like a relentless enemy—conquered but not crushed—it took a terrible vengeance.

—Edward Whymper from *A Guide to Zermatt and the Matterhorn* (1897)

From the Swiss village of Zermatt, a first glance at the Matterhorn is chilling. There are higher peaks nearby, but none stands so stark, so imposing as the defiant 14,692-foot granite pyramid. None says so brashly: "I dare you."

Twenty-year-old Edward Whymper fell under the mountain's spell in 1860. After seven attempts, his team became the first to reach the summit, in 1865. On the way down, one member slipped, yanking four men over the precipice and 4,000 feet to their deaths. Whymper and two men survived only because the rope connecting them to the others broke.

Now, as many as 2,000 people a year climb the Matterhorn during a short summer season from mid-July to mid-September. A corps of 75 expert guides has made the adventure relatively safe for adults in good physical condition. You

can hire one to make the two-day ascent for about \$480 at the *Bergführerbüro* alpine guide office on Dorfstrasse, Zermatt's main street.

Guides say men and women from 30 to 45 are the best candidates because they have greater combined mental and physical strength than younger people. But there's no upper limit on age. Two

years ago, a guide named Ulrich Inderbinen had one last go at the Matterhorn at the age of 90. "It's a one-of-a-kind joy," says Inderbinen, whose first ascent was in 1921, with his sister.

UNFORGIVING. The climb itself takes two days, starting with a hike to the base camp hut called *Hörnlihütte* at 10,695 feet. Climbers stay overnight in a rustic mountain hut, sleeping dormitory-style, or a simple hotel next door. Hot meals are served at both. At 3 a.m., guides and climbers set off in pairs, roped together and wearing headlamps. By 7:30, those who don't turn back for various reasons are enjoying sunrise on the summit with a simple high-energy breakfast of dried meat, chocolate, and hot tea.



TEST OF WILLS
SPECIAL
ENDURANCE
TRAINING AT HIGH
ALTITUDES,
INCLUDING BEING
ABLE TO WALK
UPHILL FOR TWO
OR THREE HOURS
WITHOUT
STOPPING, IS A
MUST FOR
MATTERHORN
CANDIDATES

Guides prefer not to linger long on top, because summer storms can come up quickly, covering the mountain with snow. After about 30 minutes the hardest part begins as fatigued climbers start the descent. "Going down was very tough. I was out of energy. Mental strength got me down," says Patricia Ruiz, a former IBM executive living in Paris, who prepared by jogging up the stairs to the top of the Eiffel Tower every day for three months. By noon, most are back at the base camp, ecstatic.

No doubt, the Matterhorn can still be a deadly giving. Each year, the mountain claims 10 lives of those who failed to respect the mountain's rules and risked the ascent without a guide. "It's a mistake, and you are down," over the edge of the mountain, Hermann Biner, a guide who has scaled the mountain more than 200 times. Even experienced climbers need the help of a local mountain guide to follow the safest route. There is no path, just an obscure, upward zigzag over rock towers and ridges. Those who go without a guide may fall into areas of loose rock or reach an impassable crevasse.

Anyone who can run 10 kilometers has the basic endurance to make the ascent, but not without a week or two of special training at high altitudes. Matterhorn candidates should be able to pace themselves to walk uphill for three or three hours without stopping. Guides recommend a minimum of three days of training in the surrounding mountains, including one day training with a guide on snow and ice.

The worst candidates, guides say, are those who seek to prove something to others. The best are those who are driven by awe of the mountain and a reverence for it. Ask any mountain guide to take you to the top, and he'll first look into your eyes to see which type you are. You can usually tell standing in the snow if someone can make it or not, says Biner. Once you get outside, the best way to tell is to go for it.

By Gail Shulman





CORUM® Romulus® Watch

Surrounding the dial, a bezel of hand-carved Roman numerals defines simplicity.
Solid 18 karat gold with crocodile strap.
Swiss crafted. Water-resistant.

CORUM

TOURNEAU



Italy

THE MONA LISA OF BED-AND-BREAKFASTS



Next time you glance at Leonardo da Vinci's *Mona Lisa*, don't focus on the half-smiling face, but notice instead the delicately painted

landscape of hills, vineyards, castles, and cypress trees in the background. That's almost exactly the view you get when you relax on the terrace outside your suite at Vignamaggio, a 400-acre wine estate in the Chianti area of Tuscany. There's no reason to be surprised: Leonardo grew up just a few miles from here.

Not only that, but *Mona Lisa* was born in Vignamaggio, which her family, the rich Gherardinis, called home—starting in the 14th century. "Vignamaggio was a fairly well-known winery about 500 years ago," says corporate lawyer Gianni Nunziante, who bought the 85-room Renaissance building and surrounding hills in early 1988. Over the past four years, he has poured a fortune into restoring Vignamaggio's luster as one of the top-flight red wines in Chianti, one of Europe's most important—and certainly most beautiful—vineyard regions. In the ancient underground cellars, Nunziante has installed new presses, stainless-steel vats, and what seems like acres of French oak barrels. The 150,000 bottles or so Nunziante produces each year are now accorded top honors in tastings.

Vignamaggio is more than a winery, though. With the help of Sammie Daniels, a cheerful Northern California woman

**'AGRITURISMO':
TO GET EXTRA
INCOME, FARMS
AND WINERIES
ARE RENTING OUT
ROOMS SUCH
AS THOSE AT
VIGNAMAGGIO,
IN THE CHIANTI
AREA OF TUSCANY.
A SUITE AT THE
400-ACRE ESTATE
GOES FOR \$150 TO
\$170 A DAY**

who once ran a bed-and-breakfast in near Vignamaggio, Nunziante has converted buildings on the estate into six self-contained suites for overnight guests. The wrought-iron beds, oversized oak furniture, and ancient terra-cotta tiles are part Tuscany, part Napa Valley. Open a pine wardrobe, and you find a refrigerator, sink, and stove inside. Rates of \$150 to \$170 a day are considerably less than equivalent accommodations in noisy, overcrowded Florence up the road. You can also enjoy Vignamaggio from the tennis court or the swimming pool set amid olive groves and vineyards.

NO BOOB TUBE. Although Daniels dishes up a healthy breakfast of coffee, fruit and fresh rolls, you're on your own the rest of the time. But with a bustling morning market only three miles away in the town of Greve, you can get your pick of local produce, meat, and cheese for your own feast. Naturally, there's a

almost unlimited stock of Vignamaggio wine on hand. And if you're in the mood to sample Tuscan dishes such as huge T-bone steaks alla Fiorentina or ravioli with sage and butter, the neighborhood has dozens of cozy eateries. The fare at Greve's tiny Bottega de Moro is simple but delicious. Daniels also recommends the grilled meat and lively outdoor atmosphere at nearby Trattoria dei Montagnari.

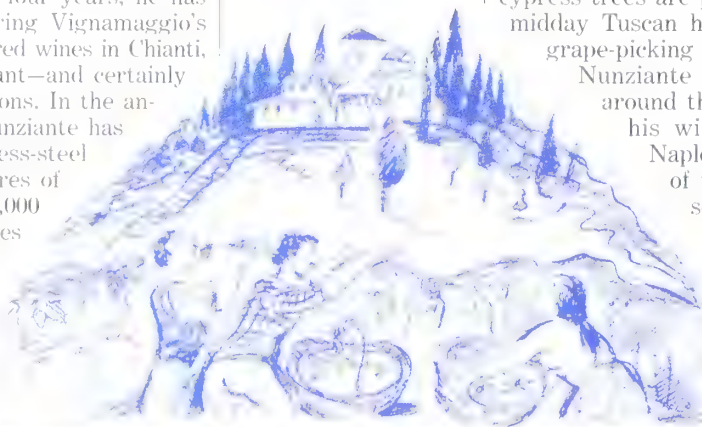
Vignamaggio is one of the best examples of *agriturismo*—Italian farms or wineries that rent out rooms to get a little extra income. Staying on a farm, in fact, can be a smart alternative for tourists with children or for those who crave the fresh country air. But don't look for room service, CNN, or valet parking.

Many farms offering *agriturismo* are within striking distance of museums, Renaissance monuments, and medieval abbeys. Vignamaggio, halfway between Florence and Siena, makes a great base for day trips around Tuscany. The only drawback of staying on a farm is that you must have a car. Get in touch with ENIT, the Italian tourist board in the U.S., for information about specific *agriturismo* spots.

Chances are, however, that you won't want to move around much once you've settled in Vignamaggio. Its formal gardens with avenues of cypress trees are perfect for getting out of the midday Tuscan heat. And as long as it's not grape-picking time in early October, owner

Nunziante will be happy to show you around the cellars and let you sample his wine. With a little prodding, Naples-born Nunziante, a member of the Columbia University law school class of '63, will even show guests the austere bedroom on the villa's ground floor where *Mona Lisa*'s mother is said to have given birth. "That's the tradition, anyway," he says.

By John Ross



FOR VOYAGES THAT CAPTURE THE IMAGINATION.

.....



DISCOVER A CRUISE SHIP LIKE NO OTHER ON THE SEAS. THE SSC RADISSON DIAMOND. WITH HER UNIQUE TWIN-HULL DESIGN AND UNMATCHED COMFORTS, SHE'S QUITE ASSUREDLY UNLIKE ANYTHING YOU HAVE EVER EXPERIENCED. A MASTERFUL BLEND OF IMAGINATIVE FORM AND INNOVATIVE FUNCTION, THE SSC RADISSON DIAMOND PROMISES A CRUISING EXPERIENCE FAR BEYOND THE EXPECTED.

THIS SPRING, HER INAUGURAL SEASON, SHE GRACES THE EXOTIC PORTS OF THE MEDITERRANEAN BEFORE LEAVING FOR THE CARIBBEAN ON A THRILLING QUEST OF CLASSIC PROPORTIONS. SO COME ABOARD THIS SPRING AND JOIN THE COMPANY OF FELLOW ADVENTURERS. THOSE DESTINED TO HAIL THE FUTURE OF OCEAN TRAVEL WITH A VOYAGE THAT CAPTURES THE IMAGINATION.



SSC RADISSON DIAMOND
DIAMOND CRUISE

FOR ITINERARIES AND INFORMATION,
CONTACT YOUR TRAVEL AGENT OR CALL 800 333-3333

We need your help to keep The America's Cup where it belongs.



There's a new kind of competition for The America's Cup. The competition for funding.

A New Zealand financier, an Italian billionaire and six foreign governments are trying to take The America's Cup. But to defend the Cup, Team Dennis Conner and his STARS & STRIPES crew will depend largely upon contributions from individual supporters...like you!

We need your help to keep The America's Cup in America. We'll recognize your donation of \$15 or more with an official STARS & STRIPES/Team Dennis Conner collector's pin. Donations of \$35 or more will also receive a handsome, colorful 20" x 26" lithograph of STARS & STRIPES at sea, suitable for framing. This poster was created exclusively for us by Bart Forbes, one of America's leading sports artists.

Help us to keep The America's Cup where it belongs. Your donation is tax-deductible. And much appreciated.

Yes, I want to help keep The America's Cup in America! Enclosed is my tax-deductible donation of:



— \$15.00 or more. Please send my free STARS & STRIPES collector's pin.

— \$35.00 or more. Please send my free STARS & STRIPES collector's pin and my Bart Forbes lithograph.

Method of payment: CHECK (made payable to CISA) VISA MASTERCARD
Card Number _____

Exp. Date _____ Signature _____

Name _____

Address _____

Zip _____

California International Sailing Association, P.O. Box 7333, Melville, N.Y. 11775-7333



Call in your donation directly

1-800-628-2557

Help Keep The America's Cup in America.

ex gives the starting page for a story or feature with a significant reference to a company. Most stories are indexed under their own names. Stories listed only in tables are not included.

Latrobe Brewing **76**
Lawrence (C.J.) **20**
Lehman Brothers **102**
Little (A.D.) **98**
Lockheed **31**
Lotus Development **86**
ITV **31**

Macy (R.H.) **30, 40**
Mannesmann **98**
Martin Marietta **31**
Matsushita Battery
Industrial **85**
Mazda **40**
McDonald's **102**
McGraw-Hill **24**
MCI **98**
McKinsey & Co. **47**
McLean McCarthy **26**
McMahan Securities **108**
Mego **110**
Merrill Lynch **20, 102, 122**
Michelin **33**
Microsoft **86, 94**
Miller Brewing **76**
Milliken **33**
MIPS Computer
Systems **86, 94**
MMS International **24**
Morgan Guaranty
Trust **102**
Morgan (J.P.) **26**
Morgan Stanley **86**
Motorola **86**

National Westminster
Bank **102**
NCR **86**
NeXT Computer **86**
NMB Semiconductor **86**

Ogden Projects **7**
Olivetti **40**
Olympia & York
Developments **26, 28, 29,**
102, 122
Ovonc Battery **85**

Pacific Telesis **98**
PaineWebber **20**
Pan American Satellite **98**
Pep Boys **108**
PepsiCo **40**
Petybon **47**

Pizza Hut 40
Price Waterhouse 26
PWA 52

Quickturn Systems 86

Randsworth Trust **29**
 Rank Xerox **98**
 REIS Reports **28**
 Renault **46**
 Revlon **6D**
 Rizzoli International
 Publications **80**
 Robertson Stephens **90**

S

Saint-Gobain **46**
Salomon **106**
Salomon Brothers **26, 28**
Santa Fe Pacific **26**
Sanyo **85**
S.G. Warburg
Securities **26**
Siemens **46, 86**
Six Flags **112**
Smith & Johnson **6D**
Smith Barney Harris
Upham **35**
Société Generale
Securities **102**
SOLAR Records **80**
Sony **51**
Spartan Mills **33**
Sprint **98**
Sun Microsystems **35, 86,**
94, 102
Sunder Brands **76**
Swiss Bank **102**

Taco Bell **40**
Target **110**
Teleport Europe **98**
Texas Instruments **86, 94**
Thomson-CSF **31**
Time Warner **6D, 112**
Tito Beverages **76**
Toshiba **85, 112**
Total **46**
Toyota **40**
Travent International **114**
TRM Copy Centers **54**
Trout & Ries **76**
Tvc Toys **110**

Unilever **98**
Union Bank of
Switzerland **46, 102**
Unisys **86**
United Airlines **52**
Universal Matchbox
Group **110**
USAir **52**

Value Merchants 34
Volkswagen 46

Wal-Mart **110**
Walt Disney **112**
Waste Management **7**
William Blair **34**
Wyeth-Ayerst
Laboratories **85**

Xerox 40

Z

Zacks Investment
Research 40

BUSINESS WEEK/JUNE 1, 1992 119



"So Slater landed a big one."

"Affiliated Brands."

"Right."

"They were really tight with their old



"Well, he learned their business inside and out. Practically overnight. Trademarks, patents, copyrights, everything



"Must have impressed them."

"Enough to make rain."

"Enough to make partner."

"Wonder who his source

The answer is in Dialog.

Information—complete, precise, up-to-the-minute. It's your most powerful tool for building a case. Or building a practice. Find the answers you need fast in Dialog,[®] the world's first and largest electronic library. We offer over 400 diverse, detailed databases, online via computer and modem. Including the most complete intellectual property collection available. And you

can access many of these Dialog databases on WESTLAW.[®]

See your Information Specialist about Dialog. Or call for a free kit on Dialog information for the legal profession.

1-800-3-DIALOG

Outside U.S. 415-858-3785 Fax 415-858-7069

Dialog Information Tools: International U.S. trademark, patent and U.S. copyright data, including regulatory information. Full-text industry reports, company profiles and current and up-to-the-minute news. Biographical, technological, environmental product liability and medical data. By Thomson & Thomson's TRADEMARK SCAN,[®] D&B, S&P, McGraw-Hill Knight-Ridder and many other sources.

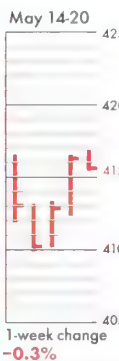
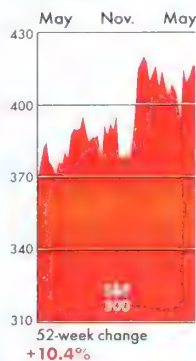
DIALOG INFORMATION SERVICES, INC.
A KNIGHT-RIDDER COMPANY

Investment Figures of the Week

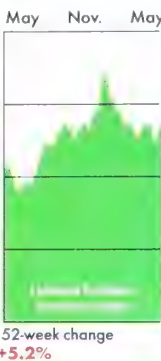
STOCKS

new came within a whisker of the 3400 barrier, registering the 20th record close of the year. But this is very much a rally in large-cap cyclical stocks, as the broader indexes still bear the record levels hit months ago. Stocks were helped by falling interest rates as talk of an impending rate cut by the Fed swept the market. That speculation was buttressed by the weaker-than-expected housing number released on May 19. Despite the gains at Olympia & York, bank shares held onto their recent gains.

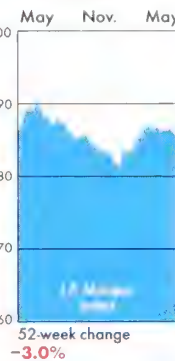
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	% change Week	52-week
STOCKS			
DOW JONES INDUSTRIALS	3393.8	0.1	16.6
DOW JONES COMPANIES (Russell 1000)	219.7	-0.2	11.9
DOW JONES COMPANIES (Russell 2000)	197.4	-0.8	14.9
DOW JONES COMPANIES (Russell 3000)	234.0	-0.2	12.1
FOREIGN STOCKS		% change (local currency)	
DOW JONES (FINANCIAL TIMES 100)	2711.9	-0.3	10.0
DOW JONES (NIKKEI INDEX)	18,675.0	-0.5	-26.5
DOW JONES (TSE COMPOSITE)	3381.2	-0.7	-1.9

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.67%	3.67%	5.6%
30-YEAR TREASURY BOND YIELD	7.81%	7.86%	8.3%
S&P 500 DIVIDEND YIELD	2.96%	2.96%	3.2%
S&P 500 PRICE/EARNINGS RATIO	25.4	25.5	17.8

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	405.9	404.8	Positive
Stocks above 26-week moving average	53.7%	56.0%	Negative
Speculative sentiment: Put/call ratio	0.46	0.43	Positive
Insider sentiment: Vickers sell/buy ratio	2.29	2.27	Neutral

INDUSTRY GROUPS

	4-week	52-week	Strongest stock in group	4-week	52-week	Price
WEEK LEADERS						
MINING	13.1	-1.7	HOMESTAKE MINING	18.2	-8.8	13
CENTER BANKS	11.3	34.6	CHASE MANHATTAN	25.5	63.9	29 1/2
EQUIPMENT AND SERVICES	9.7	-8.3	DRESSER INDUSTRIES	19.2	3.4	22 1/2
DRINKS	8.6	44.4	COCA-COLA	10.9	64.5	45 1/8
ESTIC OIL	7.0	-9.7	UNOCAL	14.4	1.5	25 7/8
WEEK LAGGARDS						
LINE TOOLS	-16.9	35.8	ACME CLEVELAND	-24.3	10.4	6 7/8
FACTURED HOUSING	-14.5	12.4	FLEETWOOD ENTERPRISES	-15.1	17.4	33 3/4
UNICATIONS EQUIPMENT	-12.5	9.6	NORTHERN TELECOM	-14.1	11.4	40 3/8
BUILDING	-8.5	13.5	KAUFMAN & BROAD HOME	-17.1	-4.7	15 1/8
CHAINS	-8.5	-15.3	BRUNO'S	-17.7	-29.1	13 3/8

MUTUAL FUNDS

	%	LAGGARDS	%
4-week total return		Four-week total return	
UNITED KINGDOM SMALL COMPANY	13.3	SCHILD VALUE	-11.6
Y STRATEGIES	12.0	HARTWELL EMERGING GROWTH	-10.5
CK INTERNATIONAL INVESTORS	9.8	SHEARSON SPECIAL EQUITIES	-10.4
52-week total return		52-week total return	
TY SELECT REGIONAL BANKS	57.2	STRATEGIC GOLD/MINERALS	-31.7
TY SELECT SAVINGS & LOAN	54.3	G. T. JAPAN GROWTH	-26.1
TY SELECT AUTOMOTIVE	54.0	DFA JAPANESE SMALL COMPANY	-25.8



RELATIVE PORTFOLIOS

	Treasury bonds	U. S. stocks	Foreign stocks	Money market fund	Gold
Amounts at the present \$10,000 one year ago portfolio					
gains indicate total returns	\$11,609 +0.94%	\$11,533 +0.02%	\$10,519 +2.01%	\$10,417 +0.06%	\$9,529 +1.25%

this page are as of market close Wednesday, May 20, 1992, unless otherwise indicated. Funds include S&P 500 companies only; performance and share prices are as of market close

May 19. Mutual fund returns are as of May 15. Relative portfolios are valued as of May 19. A more detailed explanation of this page is available on request

SWAPS: A MARKET THAT NEEDS MORE SUNLIGHT

In the financial world, a swap is essentially an exchange of payment obligation between two parties, say floating-rate interest for fixed-rate interest. During the 1980s, this exotic financing instrument and related "derivatives" came into their own as a way for Corporate America to manage its financial risk. In a remarkably short period, value of swaps outstanding has grown to \$5 trillion—one of the true financial-market success stories (page 102).

Because swaps interlock, a default by one major user might trigger a broad financial meltdown. When Drexel Burnham Lambert Inc. and Bank of New England Corp. failed, many regulators and swap dealers breathed easily only after the institutions' portfolios of derivatives were unwound without huge losses. Now, the bankruptcy filings of Olympia & York Developments Ltd. show the huge real estate developer has about \$1 billion in swaps outstanding.

Swaps dealers predictably downplay any problems and resist incursions into their practices by regulators. Undue regulations, they argue, will simply drive business offshore to less-policed environs or, worse yet, kill off one of the most innovative markets.

There's merit to that argument. Yet the swaps market does need a lot more sunlight and a little more policing. Under an edict approved last March by the Financial Accounting Standards Board, banks and brokerage firms will be asked—for the first time—to record their exposure from all derivatives transactions on their balance sheets, effective in 1993.

If swaps dealers don't want additional regulation, they must improve the credit quality of their transactions. A few firms, led by Merrill Lynch & Co. and Goldman, Sachs & Co., are spinning off their swaps operations into new units that allow the credit-rating agencies to assess the swap businesses on their own. Others should follow their lead. And as the swaps industry matures, dealers should explore establishment of a clearinghouse that, like a stock exchange, would stand behind the trades of its members. The industry's continued growth may well depend upon whether its players accept the responsibilities that come with their newfound influence.

INTEL PUTS ITS MONEY WHERE ITS FUTURE IS

Silicon Valley is littered with the bones of companies that brought a bright idea to market, only to be unable to follow up with next-generation products and the management skill to thrive in a world economy. Among the handful of U.S. companies that are proving an exception is Intel Corp. (page 86).

To be sure, the king of the microprocessor business has been blessed with one powerful advantage. IBM decided in

the 1980s to build its personal computer around an Intel chip. Since then, Intel has provided the brain for 100 million plus IBM-style PCs.

That scarcely detracts, however, from what Intel is trying to achieve at the moment. Some competing chip companies are cloning Intel's most profitable products. Others have brought out their own microprocessors that aim to unseat Intel entirely. In the face of all this, Intel is displaying the aggressiveness that more U.S. companies could use.

Chief Executive Andrew Grove is planning his product line further into the future than ever. To turn those plans into action, he's spending \$2 billion this year on research and development, plant, and equipment—a staggering sum for a company whose revenues will be about \$5.5 billion. Most aggressive, he is speeding chips to market earlier to hold rivals at bay, a strategy made possible in part by abandoning the arrogance with which Intel once treated customers and paying more heed to what they want as the company designs and builds products.

Not every U.S. manufacturer has the money or resources to attempt all this. But for those who do, or just want to try, Intel offers an important lesson: Move fast, invest heavily in R&D.

IT'S TIME FOR THE CITIES TO RESTRUCTURE

Many Americans believe the cities need a helping hand. We agree. There are many federal initiatives that could carry a big economic payoff: expanded Head Start program, welfare reform, and an increased income tax credit for the working poor (page 102). But to maintain political support for help to the cities, municipal governments are going to have to face the fact that they are perceived as unwieldy and inefficient. The bottom truth is that city governments in the 1990s, like corporations in the 1980s, need to restructure. Cut back on sclerotic bureaucracies. Streamline operations. Build accounting and information systems that show where and how taxpayer money is being spent. Free municipal employees from the stifling management. The potential payoff: Business will be more willing to invest in the cities, given a more dependable quality of urban life.

But city governments should privatize as many government services as possible. The reason is that fostering competition over who will provide a service, rather than relying on a monopoly, will lead to better service. Some form of school choice would take power away from the bureaucracy. And in many cases, competition will force the public agencies to become the more efficient organization.

Improving city schools, rebuilding a decayed infrastructure, and making the streets safe is going to cost a lot of money and require an activist government. But if city government doesn't change, political support for aid to cities will rapidly dwindle. Worse yet, fed-up middle-class urban residents and their corporate employers will continue to flee in mass exodus. Then, what remains of urban America will be beyond help.

WINNERS THE BEST PRODUCT
DESIGNS OF THE YEAR

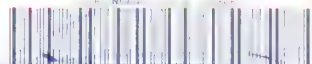
ANNUAL COMPETITION SPONSORED BY BUSINESS WEEK AND THE INDUSTRIAL DESIGNERS SOCIETY OF AMERICA

NESS WEEK

June 8



BusinessWeek



3 9042 03140292 5

8, 1992

A MCGRAW-HILL PUBLICATION

\$2.75

CORPORATE WOMEN

How Much
Progress?



CHARLOTTE BEERS
CEO, Ogilvy & Mather

CONLINE

MAY 29 1992

LIBRARY

*****5-DIGIT 94010
0602 105811160 DEC92 TIA 26
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA 94010-4

... GOOD LUCK."

BILL HAYDEN, CHAIRMAN, COMPUADD COMPUTER CORPORATION

10" Diagonal Screen
with 64 Levels of Gray

16mb Expandable to 8MB
2mb Upgrade - \$149)

Optional Internal
2400baud Modem with
5600baud Fax/Modem
Capability (\$119)

Nicad Battery

60MB Hard Drive

COMPUADD 325TX

25MHz 386SX

\$1695

MS-DOS and
Windows Preloaded

Sleep Mode Power Saver



Built-in Trackball

Free Carrying Case,
A/C Adapter Included

3.5", 1.44MB
Floppy Disk Drive

Take a look at CompuAdd's new 25MHz 386SX notebook with its built-in trackball and optional internal fax/modem. Our 325TX is Windows™-ready in every respect, with 2MB of RAM expandable to 8MB. And a 60MB hard drive preloaded with the most current

version of Windows and MS-DOS. Need more? The carrying case and A/C adapter are included. And it's priced under \$1,700.00

Give us a call now at
1-800-234-7457.

Ad Code
451

CompuAdd
CUSTOMER DRIVEN, BY DESIGN.

How To Offer Your Staff More Job Security



The 1992 Chevrolet Caprice.

When on the job means on the road, Chevrolet Caprice means on-the-job security for your people. Every '92 Caprice features a driver's-side air bag,*



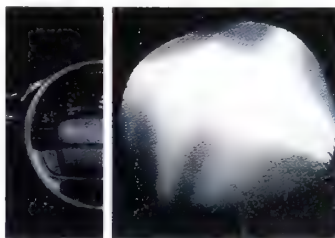
an energy-absorbing steering column, side-guard door beams and 3-point outboard rear safety belts.

Caprice's passenger compartment is surrounded by a rigid steel cage. Along with front and rear "crush" zones designed to absorb energy and help protect you in a collision.

And to help you avoid accidents in the first place, every '92 Caprice features an advanced 4-wheel anti-lock brake system (ABS) to reduce the chance of wheel lockup during braking. ABS is designed to help you maintain steering control, even in a panic stop in rain or on snow.

Call Chevrolet Fleet Sales at 1-800-248-2897 and learn more about the advanced safety features and innovations of the 1992 Chevrolet Caprice. Because,

with Chevrolet Caprice in your fleet, you'll feel a lot more secure, too.



*You must wear your safety belt to receive full benefit of the air bag. Chevrolet, the Chevrolet emblem and Caprice are registered trademarks of the GM Corp. ©1992 GM Corp. All Rights Reserved. Buckle up, America!



The Heartbeat Of America Is Winning.TM
TODAY'S FLEET COMPANY IS CHEVROLET.



MATTEL USA PRESIDENT BARAD BROKE THE GLASS CEILING, BUT DISCRIMINATION AGAINST WOMEN IS STILL COMMON IN U. S. BUSINESS

Cover Story

74 CORPORATE WOMEN

It's a confusing time for women in business. Many say things are better than ever—and many talk activism and lawsuits. Top management is still a nearly all-male club, but middle echelons are filling up with female managers. Progress? Sure. But the playing field is still far from level

77 BUSINESS WEEK/HARRIS POLL

Women say gains are too slow, and many call for activism

78 CONSUMER EXECUTIVE

Charlotte Beers of Ogilvy & Mather Worldwide has Mad Ave. abuzz

80 BARBIE'S BEST FRIEND

Jill Barad of Mattel USA teaches the old doll some new tricks

80 50 TOP WOMEN

BUSINESS WEEK's list of women with clout in their industries

81 HER OWN SHOP

Linda Wachner of Warnaco won a bitter takeover battle

82 MAPPING OUT HOME CARE

Michele Hooper of Baxter International looks overseas

83 VERY FANCY RETURNS

Joan Lappin of Gramercy Capital is winning on Wall Street

Top of the News

26 JAPAN DECELERATES

Its carmakers don't look so invincible

28 COMMENTARY

Free trade: The U. S. can't be purist

29 THE ROAD FROM RIO

It's after the summit that counts

30 CHRIS WHITTLE'S COUP

He's counting on Yale's president

31 WHAT'S AILING HUMANA?

It may be wearing too many hats

32 FARE SKIES ARE CLOUDY

The price war has majors hurting

34 SUDS IT IS

Coors will focus on brewing. Period

36 RED-HOT MAMAS

These baby dolls really deliver

36 THE RUSH TO KEEP MUM

Companies tighten privacy rules

38 THE KARAOKE KRAZE

Croaking soon at a mall nearby

40 IN BUSINESS THIS WEEK

International Business

44 EUROPE

The East's shaky nuclear reactors

48 KOREA

Korea Inc. is stumbling

51 INTERNATIONAL OUTLOOK

Why the Saudis will keep pumping

Economic Analysis

18 ECONOMIC VIEWPOINT

Kuttner: For this Christmas-in-July you could be footing the bill

22 ECONOMIC TRENDS

America's medical tab, the aging population, the savings rate and nuclear fears, single fathers

23 BUSINESS OUTLOOK

Consumers are showing more spirit in their step

86 DIFFERENT FROM YOU AND ME

The income gap between the rich and everyone else will keep widening

Government

43 WASHINGTON OUTLOOK

The head-spinning split over banking regulations

72 THE UNKINDEST TROOP CUTS

For blacks, the military has been the best employer around

Annual Design Award

52 PEOPLE-FRIENDLY PRODUCTS

How good are this year's winners? So good that they may be harbinger of a made-in-the-USA renaissance in the '90s that could rival the Japanese and European surge of the '70s and '80s.



OUT OF THE BLEAK, INTO THE BLACK: UNISYS PARED DOWN ITS MAINFRAME LINES AND MADE AGONIZING CUTS. THE PAYOFF IS TWO CONSECUTIVE QUARTERS OF PROFIT. WILL IT LAST?



26 BACKING UP: BOWING TO PRESSURE FROM WASHINGTON, TOKYO'S MITI WILL HOLD CAR EXPORTS TO 1.65 MILLION—LESS THAN LAST YEAR



44 PREVENTING CHERNOBYL II: CAN THE WEST MOVE FAST ENOUGH TO AVOID ANOTHER NUCLEAR CATASTROPHE AT ONE OF THE FORMER SOVIET BLOC'S 56 PLANTS?

The Corporation

HILTON'S GAMBLING FEVER

The hotelier never had much of a taste for gaming. But with its numbers eroding, suddenly it's building casinos right and left

Finance

A 'TEFLON GUY'

After the lawsuits, Peter Ackerman will emerge from the Drexel debacle with about \$500 million

HELLO, THIRD WORLD

Suddenly, some big banks stand to profit from renegotiations with Latin American debtors

NEW NAME, SAME LUCK

A dicey restructuring plan and an anemic market aren't the only trials facing Florida developer GDC

INSIDE WALL STREET

A healer of hearts pumps out profits. Ring this bell for a good buy? A rare find at the pawnshop

INVESTMENT FIGURES OF THE WEEK

Information Processing

FLOP OR LAUNCHING PAD?

Japan's artificial-intelligence push looked like a failure, but big rewards may yet flow from the project

UNISYS UNBOUND

Has CEO James Unruh 'pulled off one of the most significant turnarounds in history'?

Science & Technology

109 DEVELOPMENTS TO WATCH

Poison-ivy protection, chip 'sandwiches,' NASA's rocketplane, a 'high-altitude' boudoir, tiny robots

110 BIG STEP FOR SEMATECH

A new circuit-printing tool looks like the U. S. consortium's first winner

Personal Business

114 INVESTING: Coddling your nest egg

COOKING: The Santa Fe gourmet

AUTOS: Hot Mazdas and Porsches

SMART MONEY: Medical stocks

Features

6 BUSINESS WEEK INDEX

7 READERS REPORT

11 CORRECTIONS & CLARIFICATIONS

14 BOOKS

Thurrow: *Head to Head: The Coming Economic Battle Among Japan, Europe, and America*
Garten: *A Cold Peace*

119 INDEX TO COMPANIES

122 EDITORIALS

Create gender-blind companies
Nuclear safety: Don't play politics
Great design needs great teamwork

WINNERS

FROM TIRES TO COMPUTERS TO BATHTUBS TO BASEBALL MITTS, BW PRESENTS THIS YEAR'S INDUSTRIAL-DESIGN STANDOUTS



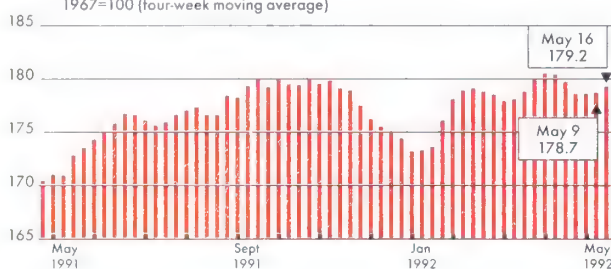
BusinessWeek Index

PRODUCTION

Change from last week: 0.3%

Change from last year: 3.7%

1967=100 (four-week moving average)



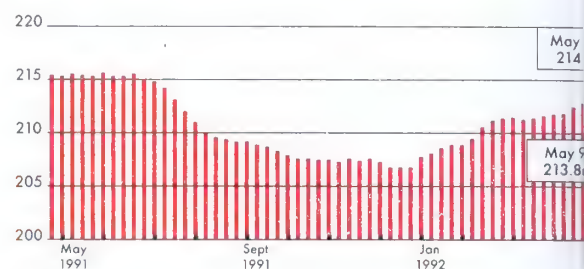
The production index increased during the week ended May 16, but in general, the index has made little headway since February. On a seasonally adjusted basis, output of autos, trucks, crude-oil refining, coal, paper, and lumber all rose, as did rail-freight traffic. Steel and paperboard production declined. Electric-power output was unchanged. Before calculation of the four-week moving average, the index edged up to 180.2, from 179.3.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.2%

Change from last year: -0.6%



The leading index continued its steady climb for this year, with another increase in the week ended May 16. Lower bond yields, a decline in the number of business failures, and improvement in the growth of real estate loans offset the stock prices and slower M2 growth. The growth rate of materials prices was unchanged for the week. Before calculation of the four-week moving average, the index rose to 215.5, from 214.3.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/23) thous. of net tons	1,801	1,749#	13.6
AUTOS (5/23) units	138,188	139,079r#	31.5
TRUCKS (5/23) units	94,145	94,086r#	21.7
ELECTRIC POWER (5/23) millions of kilowatt-hours	54,598	53,489#	-2.2
CRUDE-OIL REFINING (5/23) thous. of bbl./day	13,615	13,758#	1.0
COAL (5/16) thous. of net tons	18,577#	18,367	0.0
PAPERBOARD (5/16) thous. of tons	757.0#	788.7r	2.0
PAPER (5/16) thous. of tons	740.0#	752.0r	4.8
LUMBER (5/16) millions of ft.	497.7#	486.7	-3.8
RAIL FREIGHT (5/16) billions of ton-miles	20.7#	20.4	11.9

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (5/27)	130	129	138
GERMAN MARK (5/27)	1.63	1.60	1.72
BRITISH POUND (5/27)	1.80	1.83	1.71
FRENCH FRANC (5/27)	5.48	5.38	5.85
CANADIAN DOLLAR (5/27)	1.20	1.20	1.14
SWISS FRANC (5/27)	1.49	1.47	1.47
MEXICAN PESO (5/27)	3,088	3,085	3,005

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (5/27) \$/troy oz.	338.600	336.950	-6.3
STEEL SCRAP (5/26) #1 heavy, \$/ton	94.00	91.95	-1.1
FOODSTUFFS (5/22) index, 1967=100	199.6	203.3	-1.9
COPPER (5/23) c/lb.	105.2	105.1	0.9
ALUMINUM (5/23) c/lb.	61.0	60.0	2.0
WHEAT (5/23) #2 hard, \$/bu.	3.78	3.90	23.1
COTTON (5/23) strict low middling 1-1/16 in., c/lb.	55.31	56.51	-35.7

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market.

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/22) S&P 500	414.26	414.89	
CORPORATE BOND YIELD, Aaa (5/22)	8.23%	8.27%	
INDUSTRIAL MATERIALS PRICES (5/22)	97.8	97.7	
BUSINESS FAILURES (5/15)	396	453	
REAL ESTATE LOANS (5/13) billions	\$405.1	\$404.3r	
MONEY SUPPLY, M2 (5/11) billions	\$3,422.9	\$3,423.6r	
INITIAL CLAIMS, UNEMPLOYMENT (5/9) thous.	406	426r	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
ORDERS FOR DURABLE GOODS: MFG. (Apr.) billions	\$125.4	\$123.6r	
BUDGET SURPLUS OR DEFICIT (-) (Apr.) millions	\$14,609	-\$50,712r	
IMPORTS (Mar.) millions	\$42,791	\$40,948r	
EXPORTS (Mar.) millions	\$36,975	\$37,654r	

Sources: Commerce Dept., Treasury Dept

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/11)	\$954.8	\$951.0r	
BANKS' BUSINESS LOANS (5/13)	285.8	287.4r	
FREE RESERVES (5/13)	485r	1,100r	
NONFINANCIAL COMMERCIAL PAPER (5/13)	146.0	147.3	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in two-week period in millions)

MONEY MARKET RATES

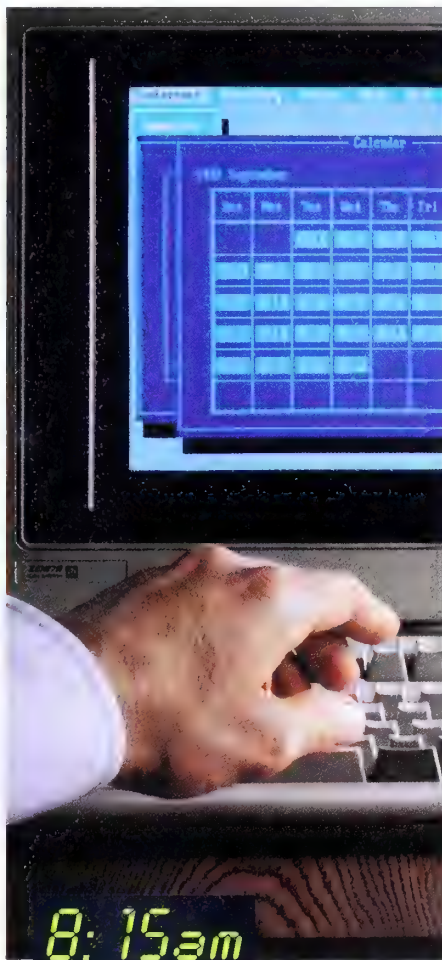
	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (5/26)	4.02%	3.80%	
PRIME (5/27)	6.50	6.50	
COMMERCIAL PAPER 3-MONTH (5/26)	3.91	3.82	
CERTIFICATES OF DEPOSIT 3-MONTH (5/27)	3.90	3.73	
EURODOLLAR 3-MONTH (5/23)	3.81	3.78	

Sources: Federal Reserve Board, First Boston

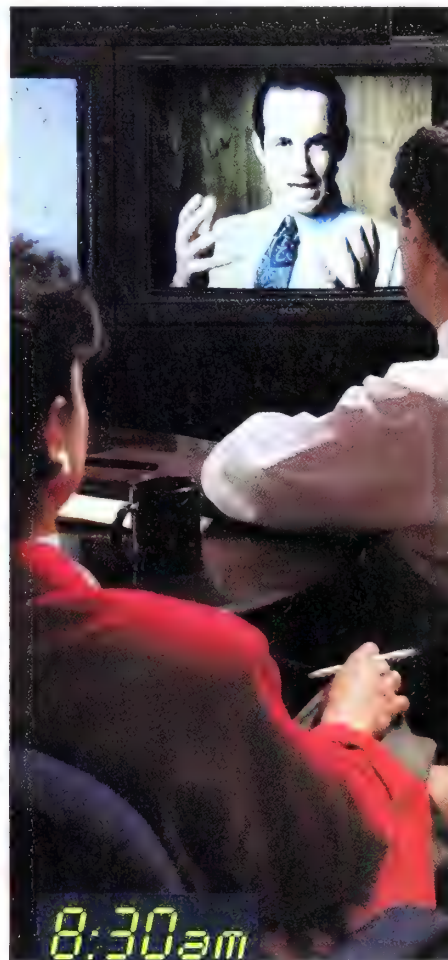
Videoconferencing at a moment's notice.



You have a great idea.



You set your schedule.



You present your idea.

With SP Telecom's Media Express network, your next great idea is only minutes away from a videoconference. Media Express videoconferencing is that easy.

Unexpected meetings to discuss timely issues can be scheduled immediately. This gives your company an edge. Even when you're not in a hurry, Media Express is still the best way to videoconference. One reason is our e-of-a-kind Automated Scheduler. Instead of using an operator, you simply choose the parameters for your conference through a PC interface.

You can schedule point-to-point or multipoint conferences. Plus, at a moment's notice, you can extend your videoconferences or end them early, and pay only for the minutes you use. Every conference has complete password security. Plus, with Media Express you'll get detailed call records sorted by cost centers according to your particular needs.

Give your company a competitive edge with a true on-demand, reliable videoconferencing network. Call today and ask about Media Express. It's ready when you are.

800-229-7782.



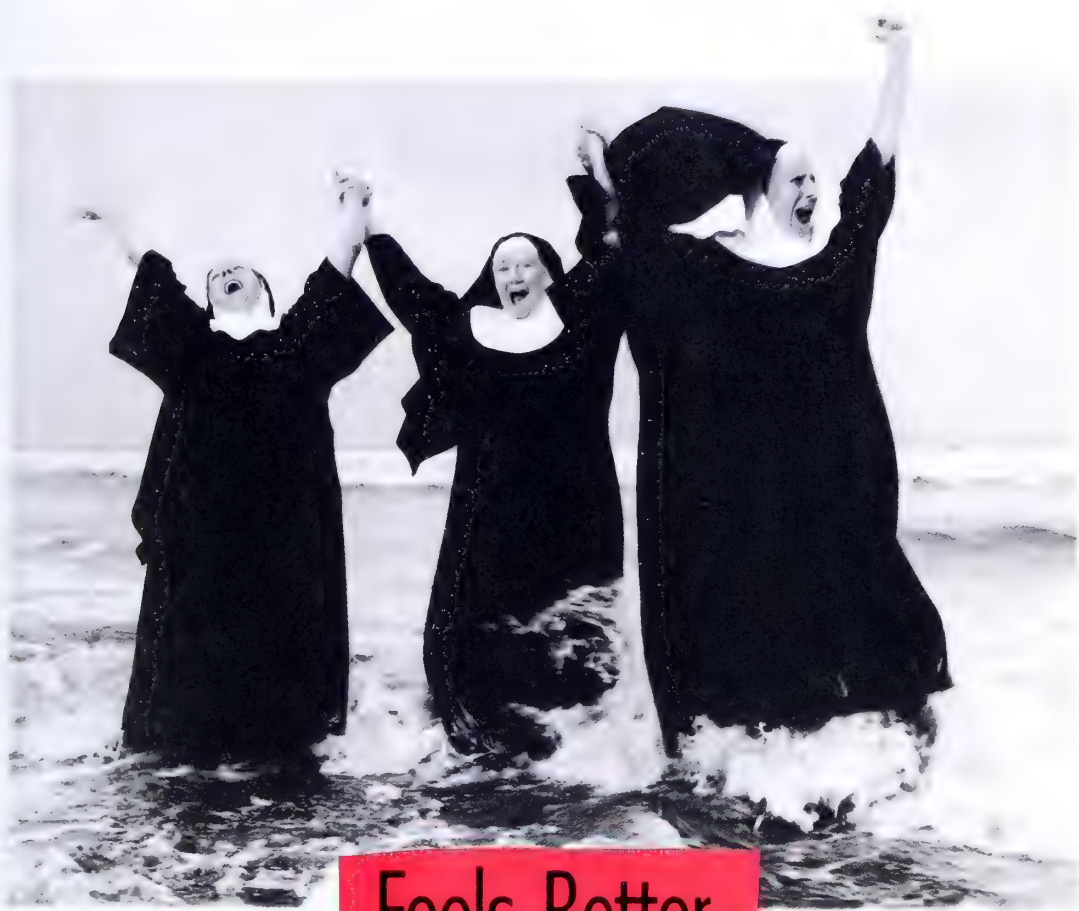
*Adding value
to your business
is our business*



Feels Good.

Lots of mice feel good, but until you've tried MouseMan – the world's first right handed, left handed, and cordless mice – you won't know how much better a mouse can feel. In a survey of 2,000 experienced mice users, 77% agree MouseMan feels better than anything they've ever laid their hands on.

At computer dealers everywhere, 1-800-231-7717.



Feels Better.



RETURN WITH US NOW TO THE GOLDEN DAYS OF YESTERDAY. AND BRING A MUG.



There was a time when beer had as much character as the people who drank it. It's that time again. Introducing Miller Reserve. An all-barley draft brewed in the classic tradition. Reserve and Reserve Light. Beer as rich in taste as it is in history.



©1992 Miller Brewing Company, Milwaukee, WI. 000, available in AK, CA, CO, MN, NV, OR, WA, WI, and metro Chicago.

BUSINESS ISN'T ALL THAT THRIVES IN FAIRFAX COUNTY.



When you move your company to Fairfax County, there's an enormous return on investment you won't see in the annual report.

But you'll hear about it every night from your family. Your children will flourish here.

Public schools here are among the nation's best. Equipment and facilities are the latest, and a significant percentage of teachers hold advanced degrees.

Little wonder, then, that more than 90% of high school students in the Fairfax County system go

on to some form of higher education.

Children get as much out of life after school as during, with 31,000 acres of parks in which to play. And with the museums and concert halls of Washington, D.C. minutes away, they'll grow up knowing there's more to life than video games and Saturday morning cartoons.

For more information about the wonders of childhood and adulthood in Fairfax County, send us the coupon.

What the County does for your kids will make you feel like one yourself.

FAIRFAX COUNTY, VIRGINIA

Please send me more information on the business advantages of Fairfax County.

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Phone _____

Fairfax County Economic Development Authority,
8300 Boone Boulevard, Suite 450, Vienna, Virginia 22182.
Telephone (703) 790-0600. Fax (703) 893-1269.

Ever Get The Feeling You're Paying For More Protection Than You Need?



That's what happened to many of the Pest Control Operators of California.

Their "boiler plate" property/liability policy had them paying the same premium rate as some of the biggest crop dusting operations, even though they didn't have the same kinds of risks.

They came to us for a solution.

Along with their insurance broker, we rolled up our sleeves, studied their industry and identified the risk differences within the pest control business. We

then built tailored coverages, services and rates to fit their specific needs.

Are they saving money? A lot. Plus we showed them how to avoid risks and minimize accident costs, which led to a substantial refund on their premiums at the end of the year. And now we're working as a team on their workers compensation insurance, too.

This is just one example of how our customer-focused property/liability and workers compensation plans are helping to control insurance costs.

For more examples, call your independent agent or broker, or our CEO, Bob Puccinelli, directly at (415) 627-5331.

Because if you're not careful, you could be paying for risks you're not even taking.

Industrial Indemnity

A Crum and Forster organization
A XEROX Financial Services Company
Home Office: San Francisco

IN-CHIEF: Stephen B. Shepard
ING EDITOR: John A. Dierdorff
ONOMIST: William Wolman
NY MANAGING EDITORS:
 1. Dowling, Mark Morrison, G. David Wallace
ECTOR: Malcolm Frouman
EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, 4. Dobrzynski, Marc Frons, Geoff Lewis, Ciro Scotti, Vamos, Lee Walczak (Washington), Chris Welles, r Zucker
AL PAGE EDITOR: John E. Pluenneke
(CORRESPONDENTS: Keith G. Felcyn
ITIONAL EDITION: William J. Holstein (Editor), Elizabeth (Sr. Editor)
WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis 3), William Glasgall, Gene G. Marcial, Bruce Nussbaum, arson, Karen Pennar, Otis Port
ITE EDITORS: Duane E. Anderson, Catherine Arnst, A. Depke, Amy Dunkin, Peter Fitch, Jeffrey M. in William D. Marbach
R. EDITORIAL OPERATIONS: Thomas J. Reed
EDITOR: Lawrence Lippmann
ART DIRECTOR: Laura Baer
R OF SYSTEMS: Claire Conte Worley
ICS: James C. Cooper (Sr. Economist/Business Outlook edileen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel c3 editors) Gene Koretz (Economic Trends editor)
MENT EDITORS: Books: Denise Demong. **Corporate Fi-** ary Light **Industries:** Thane Peterson. **Information Pro-** John W. Venty **International Edition:** Joyce Barnathan **onal News:** Peter Galuszka, Stanley Reed **Investment** : Leah Nathans Spiro. **Legal Affairs:** Michelle Galen ig, Christopher Power. **Markets & Investments:** Gary Weiss ark Landler. **Money & Banking:** John Meehan. **News:** ollingwood. **People:** Michael Oneal. **Personal Busi-** nal: H. Dunn, Joan Warner. **Science:** Emily T. Smith. **Score-** Fred F. Jespersen. **Social Issues:** Troy Segal. **Technol-** 3ert Buden. **Telecommunications:** Peter Coy. **Trans-** Andrea Rothman. **The Workplace:** Aaron Bernstein
ITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill II, tby, Suzanne Woulley, Laura Zinn. Paul M. Eng (Asst. editor)
ITORS: Harry Maurer (Deputy chief), Prudence Crowther, Mercuro (Asst. chiefs), Tim Belknap, Marc Miller, Jack Jim Taibi (Sr. copy editors), Pam Black, Carl Desens, Hardy eta Kaufman, Cynthia McClean, David Pengilly, Malka Pelter, ally, Gail Fowler, Dalia Kandyoti, Aida Rosario, Eva Stettner 3ers)
TION COPY EDITORS: Donald Halsband (Chief), Hallberg sson, Celine Keating, Robert S. Norman, Lawrence Dark, M. Romanoff
 Jon Taylor (Deputy director), Cynthia Friedman, Francesca Jay Petrow (Assoc. directors), Alice Cheung, Craig Socia editors). **Graphics:** Arthur Eves (Director), Joan Danaher director), Rob Doyle (Sr. Illustrators), Laurel Daus, fena, Ray Vella (Illustrators), Jamie Beauchamp (Computer duction: Stephen J. Romeo (Mgr.)
 Sue Bloom (Deputy Picture editor), Todd James (Scott Mlyn, Veil (Assoc. Picture editors), Anne Murray (Asst. editor) Daly (Researcher) Bettina Baudoin (Researcher - Paris) k (Traffic), Lawrence Crowe (Librarian)
IL OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne (Production managers) Thomas R. Dowd, Sharon L. Eng, Jose L. Martin, Jane M. Perkinson, Craig Sturgis, Karen v Walton, Nicholas White (Makeup editors), Dale I. Arnold, icy, Edgardo Torres (Asst. makeup editors) Donald C Traffic manager), Bruce M. Arnold, Leo Corbie (Production
ONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walecia Konrad Gary McWilliams, Geoffrey Smith (Mgr.). David Greising (Mgr.), Julia Flynn, Kevin Kelly, Lois Thermen. **Cleveland:** Schiller (Mgr.) **Connecticut:** Lisa Dnscoil. **Dallas:** Wendy fgr.) Stephanie Anderson Forest. **Detroit:** Kathleen Kerwin mes B. Treese (Sr. Correspondent), David Woodruff. **Los** Ronald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), me. **Miami:** Gail DeGeorge (Mgr.). **Philadelphia:** Joseph fgr.) **Pittsburgh:** Michael Schroeder (Mgr.), Maria Mallory scisco: Russell Mitchell (Mgr.), Richard Brandt, Joan O'C Robert Hof, Kathy Rebello. **Seattle:** Don Jones Yang (Mgr.) ton: Stephen H. Wildstrom (Sr. News Editor), Stan Crock rtor), Amy Borrus, Brian Bremner, John Carey, Paula Dwyer, st, Susan B. Garland, Howard Gleckman, Douglas Harbrecht, ng, Mark Lewyn, Paul Magnusson, Mike McNamee, Tim theanine Yang, Christina Del Valle (Asst. editor). **Bonn:** John n (Mgr.), Gail Schares. **Hong Kong:** Pete Engardo. **Lon-** ard A. Melcher (Mgr.). **Mark Marcomenti** **Mexico City:** Baker (Mgr.). **Moscow:** Rose Brady (Mgr.). **Paris:** Stewart), Bill Javetski, Jonathan B. Levine. **Rome:** John Rossant kyko: Robert Neff (Mgr.), Neil Gross, Ted Holden, Karen ler. **Toronto:** William C. Symonds (Mgr.)
AL SERVICES: **Broadcasting:** Ray Hoffman. **Business** : Barbara Boynton. **Information Services:** Jude T. Hayes Judi Crowe (Asst. editor), Fred Katzenberg, Elisa S lin Soong. **Office Manager:** Roselyn Kopit. **Public Rela-** tions: Summerson, Josephine Coppola. **Readers Report:** 3rown. **Reprint Permission:** Lawrence Clayton. **Systems:** ren (Mgr.), Ron Brayer, Courtenay Eddy
EN: John W. Patten
OPERATIONS: Gary B. Hopkins
ADVERTISING SALES: Karl A. Spangenberg
RATIONAL: Gerd Hinsel
ULATION: Kitty Carrol Williams
CTOR OF MARKETING: Cara Enckson
IS: Constance E. Bennett (San Francisco), G. Jarvis Coffin e Region), Dan Dunn (Chicago), Molly F. Ford (Northeast n)
LER: Gary M. Singer
Y, ADVERTISING BUSINESS: Linda F. Carvalho
Y, PRODUCTION: Mario J. Talluto

THE PITFALLS OF INDUSTRIAL POLICY

Regarding the article "Industrial policy" (Cover Story, Apr. 6): There is a big difference between having government funds allocated to commercial research and development in the private sector and the expansion of the federal technology Establishment to conduct commercially oriented research and development. Your article seems to suggest the latter. I strongly suggest that the former would be more productive.

Donald M. Carlton
 President
 Radian Corp.
 Austin, Tex.

The individualist entrepreneurs who drive our nascent biotech and high-technology industries would suffocate under the miasmal corruption of Gucci Gulch. Approach this gift from Washington and Harvard with caution. Keep the deficit crowd out. The Japanese analogue that our industrial policy would most resemble would not be *keiretsu* or the Ministry of International Trade & Industry, but *hara kiri*.

Charles L. Bricant III
 Ossining, N. Y.

Your article proves the correctness of Thomas Paine's statement that "A long habit of not thinking a thing wrong gives it a superficial appearance of being right..." Interference in the free-market process, and especially in innovation, never really works, besides being rationally and morally wrong.

You want to choose people who cannot even regulate their own lives, give them billions of dollars, and have them lead us into the promised land? No thanks.

William W. Morgan
 Manama, Bahrain

WHEELABRATOR: TAKING STOCK OF CEO ROONEY'S OPTIONS

Beneath the article's heading "If CEO pay makes you sick, don't look at the stock options" (Top of the News, Apr. 13) was a picture of our CEO, Phillip Rooney, accompanied by a figure pur-

porting to be the "current value" for a one-time grant of stock options that Rooney received in 1990 upon his election. What you failed to point out is that Rooney has not "reaped" a single penny of this value and that the terms of his options prevent him from realizing full value until at least 1993. The focus of this article on paper gains relating to unexercised and unvested stock options is an absurd effort to find anything new to say on this heavily reported subject.

Herbert A. Getz
 Vice-President
 Wheelabrator Technologies Inc.
 Oak Brook, Ill.

A LOT OF THRIFTS ARE THRIVING

Your otherwise positive article "Great Western is keeping its branding iron red-hot" (Finance, May 11) was marred by the inaccurate assertion that "most S&Ls are either dying or limping badly." In fact, the health of savings institutions is improving. As a group, savings institutions earned \$2 billion in 1991, a dramatic turnaround from a \$2.9 billion loss the year before. Eighty-six percent of the institutions were profitable. Although there remain unnecessary barriers to the attraction of capital, savings institutions added \$10 billion to their capital position in the last three years. Total capital is well above the government minimum. Not all of the industry's problems have been resolved, but a core of sound, healthy savings institutions has emerged from the turmoil of the 1980s. They are here to stay.

Frederick L. Webber
 President/CEO
 U. S. League of Savings Institutions
 Washington

TWO TAKES ON A REPORTER'S TWO NIGHTS IN THE SLAMMER

Regarding Russ Mitchell's article "One reporter's two nights in the slammer" (Cover Story, May 18): Your reporter should have expected that he stood a chance of being arrested or detained. Fortunately, our public officials in San Francisco took proper steps to avoid the unfortunate, wanton destruc-

BUSINESS WEEK
 JUNE 8, 1992 ***3269
 ISSN 0007-7135



Published weekly, except for one issue in January, by McGraw-Hill, Inc. Founder: James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices, McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone (212) 512-2000. Domestic Telex: 127960. International Telex: 222865. Cable: McGraw-Hill New York, TWX 710-381-4879. U.S. subscription rate \$44.95 per year; 2 years, \$74.95; 3 years, \$99.95. Single copies, \$2.75. Write for rates in other countries. Business Week Subscriber Services: 1-800-635-1200.

PHOTOCOPY PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN: 0007-7135/92/\$2.75

European Circulation Center, McGraw-Hill House, Maidenhead, Berkshire, England. Telephone: 06285 2434. Telex: 44160. Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 420, Hightstown, N.J. 08520. Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9010. Registered for GST as McGraw-Hill, Inc. GST #R123076677. Copyright 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Donne, Chairman, President and Chief Executive Officer; Robert N. Landles, Executive Vice President, General Counsel, and Secretary; Harold W. McGraw, III, Executive Vice President; Frank D. Penglase, Senior Vice President, Treasury Operations.

MASS MUTUAL GAINS 40% IN PRODUCTIVITY, THANKS TO DIGITAL.

Despite the recent economic trend, Mass Mutual has shown healthy growth in the past few years. Bruce Executive Vice President John Pajak points out, "growth isn't entirely the result of the products offered by this giant insurance carrier."

"When you come out with a hot new product, a few weeks later everyone else is doing the same thing. So the one way to separate yourself from the pack is through service."

The strength of an insurer's service greatly depends on its on-line transaction processing capabilities for claims. And Mass Mutual, known for being avant-garde by its peers, maintained that reputation by moving its life and health claims from a mainframe platform to Digital's VAXcluster systems and a VAXcluster A move they felt would give them greater flexibility and a 15% increase in productivity.

"That was our goal, that, and making sure the move would be completely transparent to our customers. They would never accuse us of hearing that their claims were delayed because we were up to speed on a new system."

With Digital's COHESION software development tool,

D I G I T A L . T H

on-site assistance, Mass Mutual built its new process-system in phases. When a phase was completed, people were trained in it, and it was brought on-line.

As a result, customers did not notice any delay. In fact, they noticed the exact opposite, as Mass Mutual was able to cut its response time from weeks to days. A

**TEAMWORK
OPENS
WAY TO
IMPRESSIVE
INCREASE.**

that resulted in a 40% increase in productivity.

"We're also capturing more data in far less time. That information is what allows us to tailor our service, that's what separates us from everyone else.

"We have a very high retention rate with clients who use our service. And thanks to Digital, our service is where it is today."

Find out how Digital can help you deliver a higher level of service. Call 1-800-2-INFO, ext. 92. Or contact your Digital office. **digital**TM



*John Pajak
Executive Vice President
Mass Mutual*

P E N A D V A N T A G E .

Readers Report

tion that occurred in Los Angeles, where officials failed to carry out their duties and responsibilities for properly protecting lives and property during the first outbreak of trouble. Tell Russ Mitchell... I don't feel sorry for him at all.

Drew McCulloch
San Jose, Calif.

On the same day that I read your story, a letter from a number of San Francisco businesspeople was made public. The letter, signed by the leaders of Pacific Telesis, Pacific Gas & Electric, the San Francisco Hotel Assn., the Chamber of Commerce, and others, expressed "heartfelt gratitude" for Mayor Frank Jordan's "quick and decisive" actions in preventing possible vandalism.

While such business leaders may revel in their collective myopia, BUSINESS WEEK's readers should know that this point of view is not shared by many of the citizens of San Francisco. Preemptive strikes on people who are expressing their First Amendment rights must never become acceptable, even if so-called "business leaders" choose to stand by and applaud such actions.

Mark E. Mackler
San Francisco

WHY IT CAN'T HAPPEN AT BIG BLUE

In your story "It can't happen here, can it?" (Cover Story, Apr. 20), IBM is cited as one of five major companies that are under fire from shareholders.

You may rest assured that shareholder discontent with company performance will never affect the majority of IBM's board. Ten of its 17 members own less than 1,500 shares each. Collectively, it is not in their interest to challenge the lackluster performance of CEO John Akers, an action that might jeopardize the maintenance of their \$55,000-per-year retainers.

Robert D. Newton
Gainesville, Fla.

INSURANCE: 'EVERYBODY'S GOTTA BE IN THE POOL'

It doesn't take a rocket scientist, or even an actuary, to see that two major things are necessary for a private-sector solution to the current mess, and both involve public action ("Health care reform: It's insurer vs. insurer," Government, May 4). First, we must move to an

all-payer system, where providers establish their fee schedules, but set, they must charge the same per service to all payers, public and private. Society must say that price discrimination is not acceptable. This will allow insurers large and small, PPOs, and TPAs to compete on the basis of utilization review, quality of monitoring, and old-fashioned service.

Second, if the insurance "concept" is to continue to work through private insurers, but with open enrollment, less underwriting and restrictions on preexisting conditions, etc., everyone must be required to have coverage. The system will not work if people are allowed to remain outside until they are sick, then expect "insurance" to pay their bills. For "pooling" to work, everybody has to be in the pool.

Hobson C.
Minneapolis

CATERPILLAR WORKERS DIDN'T BACK DOWN—THEY FACED REALITY

You have just won my subscriber loyalty for at least another year. Your story "How to strike a balance when workers strike" (Editorials, May 4)

43

Inches. The average distance ULTRA[®] beat Titleist[®] HVC by in ULTRA Challenges in 65 cities across the country. And not a bit over-stated. ULTRA by Wilson[®]. Measurably Longer[™] than anything out there.



Wilson
Made to Win[™]

lead on, but I'll go one step further. If unions are dinosaurs in today's economy and are not in touch with reality. Why else would they have a gun to Eastern Air Lines's head if it was apparent that the register was empty? I'm sure all of those unemployed pilots and machinists really appreciated the effort.

terpillar employees should be careful that the United Auto Workers has good sense, at least this time, to a little. That's not "backing down," it's just waking up.

Greg Feustel
Apopka, Fla.

IF U.S. HUNG UP ETHICS?

While you Americans have sleepless nights worrying about ethics, ethics are taught? Harvard gives it old college try," Top of The News, 6), the Europeans and Japanese are doing a killing exporting. This "ethics" of yours is one of the biggest on U.S. competition. In order to get the score even, Harvard should part of this money to some Japanese and German universities.

Osvaldo Coelho
Curitiba, Brazil

CORRECTIONS & CLARIFICATIONS

In "The judgment of Salomon: An anticlimax" (Finance, June 1) we erred in saying that Salomon Inc. will be suspended as a primary dealer in Treasury securities for two months beginning June 1. Salomon will be suspended from acting as a primary dealer for that period, but it will not lose its primary dealer designation.

ETHICS 101: THE REAL WORLD TAUGHT WITH REAL ISSUES

I'm embarrassed that my alma mater (University of California, Berkeley) harbors a business school professor who considers teaching ethics "an oxymoron" ("Teaching ethics is... an oxymoron," Readers Report, May 4). In my Introduction to Business classes, I discuss ethical issues in business using cases and examples from the real world of commerce and industry.

I believe these discussions help students understand that ethical, moral behavior learned (or not learned) at home is recognized and rewarded in business and that conversely unethical behavior usually is punished. This helps balance

the distortions, the exceptions loudly proclaimed by most of the media.

Eric H. Nielsen
Executive-in-Residence
College of Charleston
Charleston, S.C.

WHAT WILL MAKE A CAR DEALER'S SMILE FADE FAST?

No, car dealers do not have souls—never had and never will ("What's this—car dealers with souls?," Marketing, Apr. 6). The new fixed-price, no-haggle sales strategy is an attempt to protect dealerships from a detested form of vermin—educated buyers. From the salesperson's perspective, buyer ignorance translates into maximum profit. While unsuccessfully shopping for a Ford Explorer, I noticed that toothy, friendly smiles quickly disappeared after mentioning I had checked prices with a credit union and auto price service. Buyer knowledge is a resented advantage.

H. L. Bean
Jonesboro, Ga.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4464, Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.



The information service that's more than a retriever. It's your own personal bloodhound.

Dow Jones News/Retrieval is not only loyal, it's extraordinarily obedient. Not only will it fetch facts for you, but all on its own it will relentlessly—and continuously—track down exactly the

news and information you need.

All you have to do is set up electronic folders for topics you want to be kept current on. Then

News/Retrieval automatically searches through the vast news sources of Dow Jones, and feeds the folders a steady stream of timely, preselected news. All of which you

can read when it's most convenient for you. Up-to-the-second information that's

drawn from our proprietary newswires, the full text of *The Wall Street Journal*, and thousands of other local, regional and national business pub-

lications. You'll also have access to a wealth of historical business and financial data.

To send Dow Jones News/Retrieval chasing after the news you need, simply call our toll-free number.

DOW JONES NEWS/RETRIEVAL
The lifeblood of business.™

*Just \$29.95 gets you started and includes three free hours**

**For more information, call
1-800-522-3567, Ext. 231.**

*Offering subject to change without notice. Offer good only in the United States. Excludes Alaska and Hawaii. For more information, call 1-800-522-3567, Ext. 231. © 1992 Dow Jones & Company Inc. All rights reserved.



AT&T Electronic Mail Services.

With AT&T Electronic Mail Services, you no longer have to rely upon the post office, faxes, messengers or interoffice mail to send a message. Instead, with the computer right on your desk, you can use Electronic Mail to connect with everyone you need to communicate with during your day. And you can do it faster, easier and more efficiently than you ever thought possible.

Since Electronic Mail moves information electronically, it's paperless. It's also easy to use—you just type a message, address it and push the send button. And that same button lets you send information to hundreds of recipients. And with our fax, telex and postal delivery options, they don't even need to have a computer. Nor are you limited to written messages; it's just as easy to send spreadsheets and computer files.

How to teach the computer on your desk to deliver

And with our access and delivery options, Electronic Mail is compatible with the communication systems you already own.

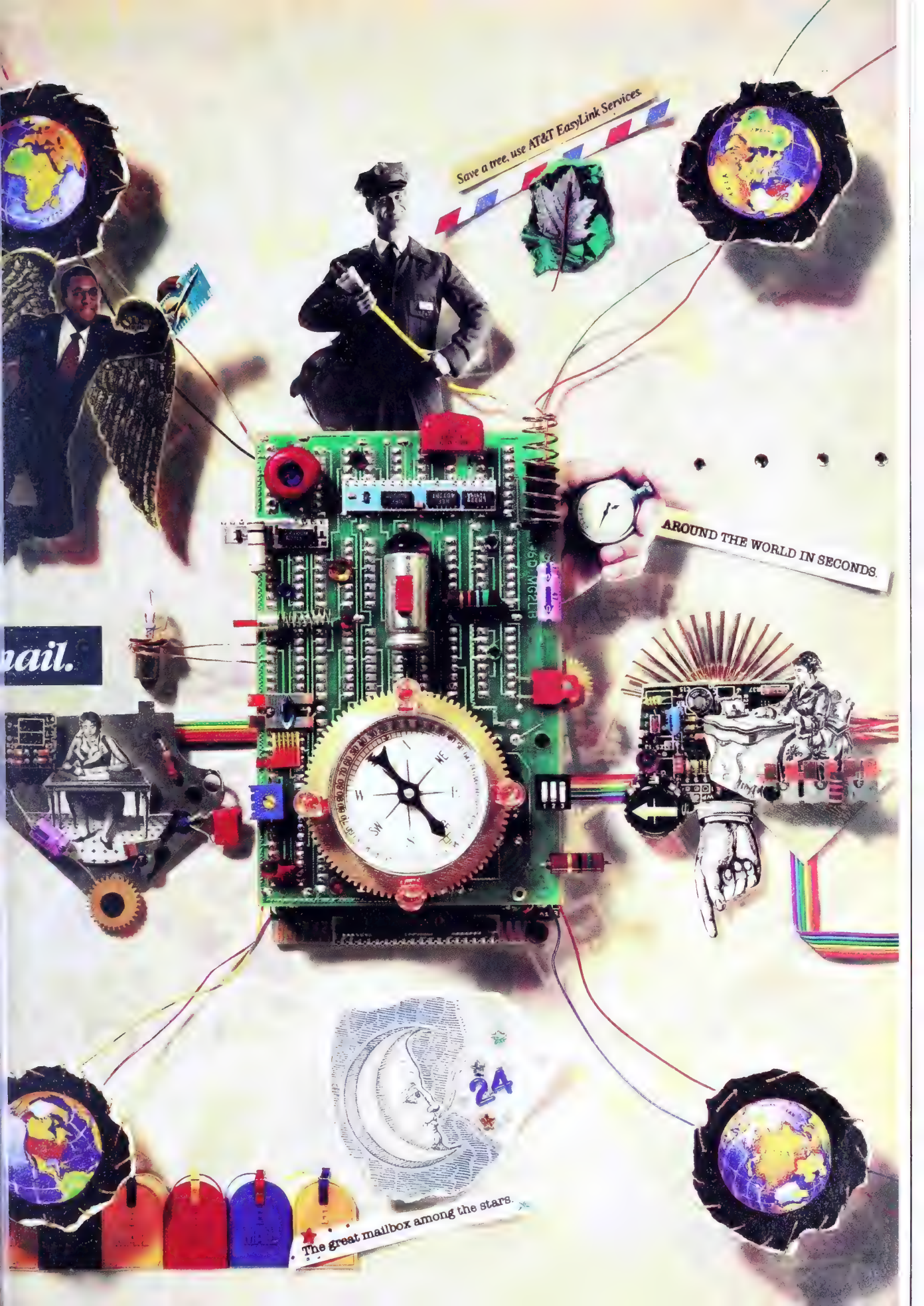
AT&T Electronic Mail Services is just one of the many electronic messaging solutions offered by AT&T EasyLink Services. Together they can answer all your global communication needs and help you *see*, *hear* and *say* things you never could before.

For more information on how AT&T EasyLink Services—the worldwide leader in electronic mail services—can deliver a mail service that is right for you, call your account representative or AT&T EasyLink Services at 1 800 242-6005, Dept. 6318.



AT&T

EasyLink Services



Save a tree, use AT&T EasyLink Services

mail.

AROUND THE WORLD IN SECONDS.

The great mailbox among the stars.

HEAD TO HEAD: THE COMING ECONOMIC BATTLE AMONG JAPAN, EUROPE, AND AMERICA

By Lester Thurow

Morrow • 336pp • \$25

A COLD PEACE: AMERICA, JAPAN, GERMANY, AND THE STRUGGLE FOR SUPREMACY

By Jeffrey E. Garten

Times Books • 304pp • \$22

AMERICA AND THE NEW TRIANGLE OF POWER

With the collapse of Soviet communism, economically drained Americans are reexamining how they organize themselves at home and conduct themselves abroad. They know that military power suddenly counts for much less, and economic competition much more. But the great debate about just how to respond to this post-postwar reality is just beginning.

That's what makes these two books so timely and provocative. *Head to Head* is the latest of several books by economist Lester Thurow, dean of Massachusetts Institute of Technology's Sloan School of Management. *A Cold Peace* is the first for Jeffrey E. Garten, an investment banker with the Blackstone Group and a former State Dept. policy planner.

Both men reject the notion of one happy, win-win global economy in which all nations organize their economies the same way and share the same interests. This has been the basis of President Bush's mushy vision of a U.S.-dominated "new world order." Its essential flaw is glaring: Without the need for U.S. military protection, why should successful nations follow the lead of the U.S.?

In fact, it's clear that Japan, Germany, and the rest of Europe don't necessarily share U.S. goals or values. One sign: Europe's and Japan's thwarting of the U.S. drive for a new round of trade liberalization in the General Agreement on Tariffs & Trade (GATT). Both Thurow and Garten believe such multilateral coordination is dead or dying. With Moscow defeated, Thurow writes, "no one has to moderate economic positions to preserve... military alliances."

One corollary is that pure free trade—part of what Thurow calls America's "economic theology"—can no longer work. Like it or not, the world is moving in the direction of more managed trade. Pressure on the U.S. to better manage its industrial and technological policies is also growing. In short, Americans must define a new economic strategy.

Thurow is best when describing individualistic Anglo-Saxon capitalism as just one model competing with the communitarian German and Japanese variants. He repeats oft-heard criticisms of the Anglo-Saxon system—too financially driven, too short-term, too antagonistic—but weaves them into a compelling

argument for making American capitalism more competitive. The U.S. system, he notes, is the "exact opposite" of those of Germany and Japan, where larger industrial groups, insulated from short-term financial pressures, dominate.

But Thurow's grasp of foreign complexities is weak. He says, for example, that "at the stroke of midnight on December 31, 1992, the European Community integrates, and... instantly becomes by far the world's largest economic market." In fact, this dauntingly complex melding will take years,

to wring the obsession with short-term profits out of the system. Both are easier said than done. Garten asserts, simply, that U.S. thinking and resources main too geared to military conflict would include in the National Security Council such departments as Education and Treasury, to create a central planning mechanism. But why create a new bureaucracy where others have failed?

Neither author offers strategies. Americans asking such questions: How do we create economic growth? Des Moines or Decatur? How can companies compete internationally? How do we stay on technology's cutting edge? How do we pay for it all?

The message to Americans, it should be to stop worrying about identity and focus, instead, on results. Economic planning helped build a strong defense, shouldn't we apply those lessons to the civilian economy? If nurturing deep relations between companies



and the outcome is far from certain.

Garten understands Europe much better. Germany, he emphasizes, is preoccupied internally with reunification and externally with Western and Eastern Europe. So the Germans, he says, won't emerge to stabilize a global order as the U.S. once did. The Japanese won't either; they simply don't believe in it.

Rather, Garten foresees a grand power triangle made up of the U.S., Germany, and Japan, within which alliances will shift depending on the issues at stake. The challenge for America will be "to live with nations that are fundamentally different, without viewing every challenge as a provocation, and without creating the wild gyrations of emotion that characterized the past," he writes.

Both men are short on practical recommendations. Thurow wants to relax antitrust rules so that U.S. companies can form larger competitive groups and

university researchers will give companies an advantage, why not? If a government agency can help a company get into the European market, not let it happen? Those who fret such "industrial policy" interferes with the purity of the marketplace have heads stuck firmly in a bygone era.

Just as the U.S. once organized military conflict, it must now align companies, government, schools, and universities for the global economic contest. Americans must find intersections of interest with each other, rather than revel in schisms between Republican and Democrat, conservative and liberal. Thurow and Garten provide building blocks for understanding this new world. Much work remains to translate America's new *weltanschauung* into reality.

BY WILLIAM J. HOLT
International edition editor Holstein
author of *The Japanese Power Game*.

"SEND A MESSAGE TO AMERICA"

Vincent A. Sarni
Chairman and CEO, PPG Industries, Inc.
Chairman, National Organization on Disability



The National Organization on Disability and the U.S. Postal Service are proud to announce the creation of pre-stamped envelopes to send a message to all Americans. It's the first pre-stamped envelope ever to honor people with disabilities. And the message is clear. "For a stronger America, count us in! 43 million people with disabilities."

These envelopes can be requested and ordered at post offices starting July 23, 1992 to coincide with the second anniversary of the historic Americans with Disabilities Act.

By using these envelopes for your business and personal use, you'll be sending a strong message of support for the full participation of Americans with disabilities in all aspects of life.

You can purchase the envelopes in #10 business size and #6³/₄ stationery size with corporate and personal customized imprints.

So show your support for millions of your fellow citizens and use these envelopes to send the message: For a stronger America, the right way to go is the path of inclusion and expanded participation of people with disabilities.

NOD
NATIONAL
ORGANIZATION ON
DISABILITY



Name and Return Address
of Organization or Individual

Name and Return Address
of Organization or Individual

Proceeds from the sale of
these envelopes go to the
U.S. Postal Service.

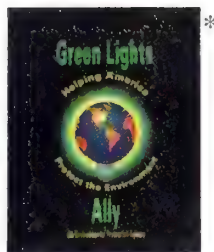
You Have To Go A Long Way To Find



Lighting As Efficient As Ours.



True, you could opt for the big ball of superheated gas. But we think there are clear-cut advantages to GE Lighting. For



instance, our TRIMLINE T8 fluorescent lamps can save you money. These remarkable lamps use less energy than our regular fluorescents. That means reduced electric bills for you. And TRIMLINE T8 fluorescents can qualify for many utilities rebate programs.

Their rare-earth phosphors provide rich, balanced light and excellent color rendition. So you can create a more appealing environment. And since T8 lamps are only an inch in diameter, they give you greater design flexibility.



If you have questions about lighting, let GE illuminate you. Call our number, 1-800-GE-LAMPS. When you consider our biggest competitor is 93 million miles away, is there really any other choice?

GE Is Light. And The Light Matters.



GE Lighting

FOR THIS CHRISTMAS-IN-JULY, YOU COULD BE FOOTING THE BILL

BY ROBERT KUTTNER



If corporations are allowed to take LBO deductions for intangible assets such as goodwill, it could trigger a new round of buyout mania—subsidized directly by the taxpayer

Here's a hot idea that deserves a quick burial: Let's increase the federal debt by an estimated \$3.6 billion to have taxpayers subsidize another round of leveraged buyouts. This is precisely what would be allowed under tax legislation greased for quick passage some time in June. Present law lets companies deduct the cost of tangible assets purchased in corporate buyouts. The acquiring company may also deduct interest costs on borrowed money. This tax subsidy was generous enough to stimulate the unprecedented buyout wave of the 1980s, which cost taxpayers upwards of \$80 billion and had consequences that were at best mixed.

The proposed new law, H.R. 3035, would allow for the first time the deduction of intangible goodwill. The Internal Revenue Service currently disallows such deductions. According to then IRS Commissioner Fred T. Goldberg Jr., acquirers have tried to take tax deductions for at least 159 different categories of intangibles. These range from arguably legitimate assets, including copyrights, trademarks, and dealer networks, to a variety of pie-in-the-sky write-offs such as having "underdeveloped competition" and even "nonunion status."

APPEALS APLENTY. This Christmas-in-July proposal is being pushed by a coalition of Wall Street firms that promote LBOs and by corporations, such as Philip Morris Cos., which want the change in the law to be retroactive, so they can reap tax windfalls on buyouts already consummated. In 1987, the House passed a bill explicitly prohibiting deduction of goodwill, but the bill was opposed by the Reagan Administration and died in the Senate.

Meantime, some 2,000 appeals have been filed in connection with corporate buyouts, challenging the IRS position. Lower courts have issued contradictory rulings on the question, the Supreme Court has agreed to review it, and the takeover crowd is nervous the high court will back the IRS. The Administration supports the proposed bill. The IRS opposes the whole concept, but Goldberg, as a loyal member of the Administration, has testified in support on grounds that it would at least clarify the law. "From a tax administrator's perspective, the present situation is untenable because it embroils the government in endless factual inquiries," Goldberg testified to the House Ways & Means Committee, adding that some \$8.5 billion worth of proposed tax adjustments are now on appeal in the courts. Goldberg calculates the government has spent an average of 6,000 staff hours and \$160,000 in out-of-pocket costs per case.

But from the perspective of a company seeking tax write-offs or a Wall Street house

promoting mergers and acquisitions, the of litigation and lobbying are well worn. House Ways & Means Chairman Dan Rostenkowski (D-Ill.), who led the fight in 1987 to deny deductions for corporate goodwill, supports the proposal. Says James Jaffe, Rostenkowski aide: "This proposal comes not only out of the 'tax-wonk' community—the Treasury and the tax bar. The corporate guys and the IRS are both spending a lot of money to litigate this, so why don't we just come up with a relatively simple rule?"

SHEER WASTE. Jaffe says Rostenkowski tried to simplify the rule by prohibiting the deduction but lacked the votes. The chairman now favors simplifying it. But this was hardly the best child of tax wonks. Big money is at stake and the lobbying coalition includes upwards of 20 corporations involved in M&As, including Citicorp, Honeywell, Gillette, Quaker Oats, and Levi Strauss—several of whose political action committees have contributed to both parties. Philip Morris, among other courtesies to the Democrats, donated generously to the anti-term-limit initiative in Washington state, which would have ended the career of Speaker of the House Thomas S. Foley (D-Wash.).

Arbitrage specialists have been quoted as saying the law, if enacted, would set off another merger boom and drive up the price of potential target companies. If so, the legislation is sheer economic waste, since the run-up would be subsidized directly by taxpayers. Critics such as Robert S. McIntyre of Citizens for Tax Justice suggest that the legislation's backers are lobbying for the bailout mainly because they overpaid for many of their target companies in previous mergers and now are hoping the taxpayer will make the difference. McIntyre urges that the law be toughened to remove some of the existing tax-subsidy of M&As, notably the ability to deduct interest costs. "In the case of a takeover financed by very risky junk bonds," McIntyre argues, "the interest payment is really no more like a dividend, which is not deductible."

This little episode is emblematic of how the tax code fails the economy and public finances. Both parties say they want to reduce the deficit but neither can resist pandering to special interests. The forces representing the public interest in fiscal discipline are outgunned. The Administration says it believes in free markets, but when those markets produce costly mistakes, it uses taxpayer money for expensive bailouts. And industry, instead of investing in new products and better management, finds it more cost-effective to invest in litigation and lobbying. No wonder American companies are in trouble competing.

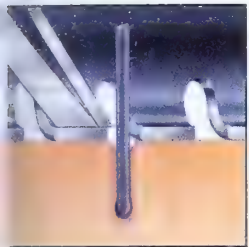
ROBERT KUTTNER IS CO-EDITOR OF THE AMERICAN PROSPECT AND AUTHOR OF THE END OF LAISSEZ-FAIRE

BY CUTTING YOUR BEARD BELOW THE SKIN IN COMPLETE COMFORT, NORELCO RAISES THE STANDARDS OF SHAVING.

It sounds incredible.

But that's because it is.

Norelco™ can actually shave you



Razor combs quickly direct hair to the "Lift and Cut" system.



Lifter notches into hair and lifts it up.



Blade cuts lifted hair which then drops back below skin level.

below skin level to give you an exceptionally close shave. And because you can shave without the blades even touching your face, the results are remarkably comfortable.

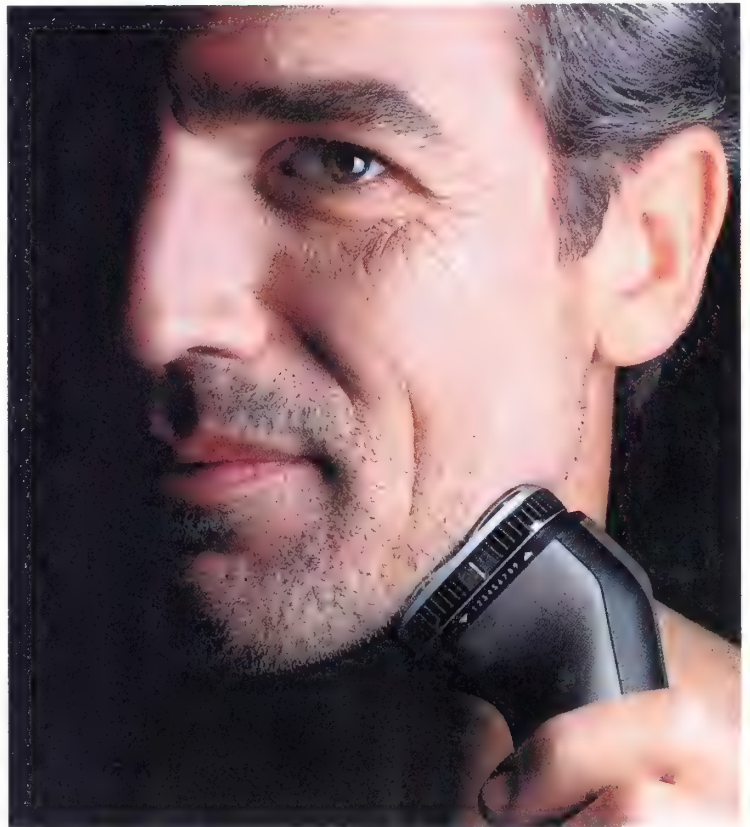
How is this possible?

Norelco's patented "Lift and Cut"™ system is skillfully engineered with a precision lifter positioned in front of the blade. When the lifter notches into a hair, it lifts it up. As the blade cuts it, the hair shaft can actually drop *below* the skin. The blades don't even touch your face.

Such superior technology delivers not only an incredibly close shave. But a totally comfortable one.

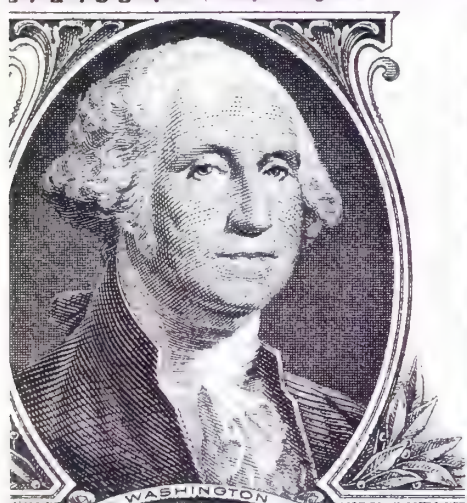
Try the Norelco.

And begin appreciating the highest standards of shaving for yourself.



Norelco®

We make close comfortable.



Over 80% of the most prominent figures in banking count on our computer solutions.

Throughout the world, bankers speak dollars and bankers who speak yen and bankers who speak pesos, Deutsche marks, and all speak to Unisys for answers to mission-critical needs.

Forty-one of the world's 50 banks rely on Unisys information systems. And half the world's \$40 billion annually—are produced on Unisys computers. But the story hardly stops there.

Over 3,000 financial institutions

depend on our systems for funds transfer. We've put our banking customers a year ahead of the competition in check imaging solutions. We offer unequalled capability in the revenue-generating area of branch automation. And we rank first in customer satisfaction surveys of markets as demanding as Japan.

UNISYS

We make it happen.

So it's hardly surprising that ten of Japan's top ten banks, ten of Europe's top ten, nine of America's top ten, seven of twelve U.S. Federal Reserve banks, and 60,000 other distinguished customers recognize Unisys as a world leader in mission-critical information systems.

A few more prominent figures: 1-800-448-1424, ext. 170. When you call, ask how we can put the advanced technology and dedicated people of Unisys to work on your account.

BY GENE KORETZ

AMERICA'S MEDICAL TAB IS GROWING FASTER THAN EVER...

As the economy struggles to quicken the pace of recovery, the nation's medical bill is growing inexorably larger. According to estimates by the Health Care Financing Administration, health care expenditures increased from 9.3% of gross domestic product in 1980 to 12.4% in 1990, and they almost certainly topped 13% in 1991.

Recent projections by the HCFA indicate that the nation's health outlays will reach \$1.6 trillion by the year 2000, up from \$666.2 billion in 1990. What's more, the growth rate of real per capita health spending, which rose 50% faster than per capita GDP in the late 1980s, is projected to quicken in the 1990s, even though overall economic growth is expected to be slower. The upshot: Health expenditures could well account for 17% of GDP by the year 2000, or about one-sixth of national output.

By international standards, America's record in controlling medical costs over the past decade has been dismal. In 1980, total health costs as a percent of GDP were slightly more than two percentage points higher in the U.S. than the average for 24 members of the Organization for Economic Cooperation & Development: 9.3% vs. 7.1%. But by 1990, the gap had widened to nearly five percentage points: 12.4% vs. 7.6%.

Indeed, in such nations as Japan, Switzerland, Germany, and Sweden, health spending as a share of national output was the either the same in 1990 as in 1980 or had actually declined.

...AND THAT'S BAD NEWS FOR AN AGING POPULATION

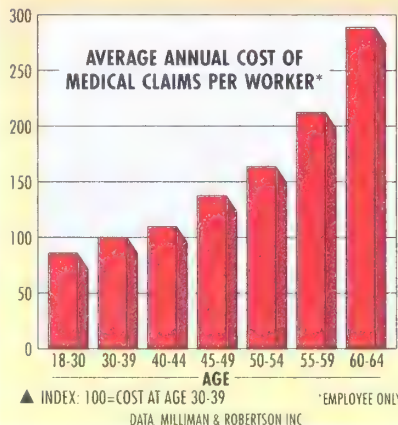
Medical economists call the aging of the population a "ticking time bomb." As the chart shows, claims filed by employees to cover their own medical costs rise sharply as they grow older. On average, someone aged 55 to 59, for example, incurs medical costs that are 50% higher than someone 10 years younger and are more than double the average medical bills of someone in his or her late 30s.

Despite this effect, however, and despite the fact that the oldest baby boomers are approaching middle age, experts do not expect the demographic changes

by themselves to have a large impact on medical outlays in the 1990s. Indeed, Health Care Financing Administration analysts think that they will account for less than 5% of the rise in outlays.

The reason: The age structure of the population will change very slowly over the next 10 years but far more dramatically over the next 20 to 30 years. The youngest baby boomers, for example,

HOW HEALTH COSTS RISE AS THE WORKFORCE AGES



are entering their 30s, while the oldest are only starting to enter their mid-40s.

Thus, for now, the relentless aging of the population stands as a grim reminder of the need to bring rising health care costs under control before the baby boomers start retiring. Recent studies indicate that people 65 years of age and older spend an average of four times as much on health care as younger people.

BAN THE BOMB, AND THE SAVINGS RATE COULD MUSHROOM

Why save for the future if you think there's a good chance there won't be a future for you to enjoy? In the past decade, University of Michigan economist Joel B. Slemrod has published separate studies which showed that fear of nuclear war has tended to depress the U.S. personal savings rate, and that people in countries with high savings rates tend to exhibit less fear of a nuclear war threat than citizens in nations with low savings rates.

Now, Slemrod and political scientist Bruce Russett of Yale University have found confirming evidence at the individual level in consumer surveys that were conducted by the University of Michigan's Survey Research Center in 1990. The surveys inquired about people's economic situations, educational

backgrounds, satisfaction with their lives, and past, present, and expected savings behavior. As a last question, they asked how individuals felt regarding the likelihood of a nuclear war and whether their feelings about this changed in the past year.

In their analysis of the survey results, the two researchers found that respondents' professed fears about the likelihood of a nuclear war were significantly related to their savings behavior, even after adjusting for age, economic status, general happiness, and other factors that might affect savings. Further, people tended to save more and to plan to increase their savings in the event of a nuclear holocaust diminishing.

Fear of nuclear war, of course, is neither the only nor the most important variable that appears to influence savings behavior. But Slemrod points out that the U.S. personal savings rate has risen somewhat since the cold war ended. "If international tensions continue to subside," he says, "a higher U.S. savings rate could turn out to be an unexpected peace dividend."

THE EXPANDING LEGIONS OF SINGLE DADS

While Vice-President Dan Quayle's remarks about *Murphy Brown* have spotlighted the growth of single mother households, the fastest-growing family type in percentage terms is the single-parent families headed by fathers. Moreover, a recent paper by researchers Daniel R. Meyer and Steven Garasky of the University of Wisconsin's Institute for Research on Poverty points out that the number of unmarried fathers within this group has soared nearly twentyfold in the past two decades.

Back in 1970, note the researchers, there were less than 500,000 single father families. But by 1989, they numbered 1.4 million, compared with 7.4 million female-headed families. And the number of children living with nonmarried fathers has soared from 320,000 in 1970 to 488,000 in 1990.

Although single-father families are better off than single-mother families, they're hardly well off. Almost 20% are below the poverty line, and another 20% aren't far above it. The study also indicates that single fathers are far less likely to be receiving welfare or to be awarded support from their child's other parent than are single mothers—even when they are awarded such support by the courts, they are much less likely to actually receive such payments.

CONSUMERS ARE SHOWING MORE SPRING IN THEIR STEP

The summer sun isn't the only thing warming up the U.S. landscape. Consumers are glowing a bit brighter about their economic lot. And new orders stoking the fires under manufacturing. The economy t in a heat wave, but cheerier shoppers and busier factories are helping to raise the temperature of this guild recovery.

to be sure, ballooning federal deficits and uncertain prospects still send a chill through the air. But the recovery seems to be moving fast enough to shake these concerns. In particular, the downtrend in jobless claims suggests that employment worries may be ebbing.

FACTORY ORDERS HEAD HIGHER

DURABLE GOODS



rt), and the rising trend reflects the better outlook domestic demand of big-ticket items.

However, the level of durable-goods shipments is surging the increase in new orders. That means the klog of unfilled orders continues to decline. Unfilled orders dropped by 0.2% in April and now stand at their est level in 2½ years. Manufacturers will have to see r backlogs grow fatter before they feel confident ough to increase output and add workers. The upward id in new orders suggests that the backlog could turn and soon.

LOCKEYED OPTIMISM RISING LAST

Factory orders may get a boost from a more bullish consumer sector. The recent increase in optimism suggests that consumers will continue to spend at a moderate pace this summer. The Conference Board's index of consumer confidence staged a big advance in May: The x rose to 71.6 from 65.1 in April. Since February, it rebounded by more than 24 points. And the improvement is echoed by a gain in early May in the University Michigan's consumer-sentiment index.

to be sure, the Conference Board index followed a lar pattern in 1991—but with a big difference. Last 's rally was more wishful thinking about the future, ed by the end of the gulf war. Even as the overall

confidence index rose last spring, consumers felt increasingly shaky about the current state of the economy.

This time, says the Board, consumers are upbeat about both the present economic situation and expectations over the next six months. The strong rebounds in both readings have pushed the overall index to its highest level since last September (chart). The Board notes that such a strong upturn in the index "appears to leave little doubt that the economy is at long last recovering."

But even if consumers are strolling on the sunny side of the street, they haven't left their worries on the doorstep. Employment remains a big concern for many households. The Board reports that 40.3% of the 5,000 consumers surveyed described jobs as hard to get in May. That's down from April's 45.2% reading, but it's still a high percentage. Only 5.9% think jobs are plentiful—down from 9.8% a year ago.

Consumers are also troubled about future income prospects. Fewer and fewer households expect their earnings to increase over the next six months. In May, just 16.9% felt that their incomes would be higher by November. That's one of the lowest readings on income expectations since the 1981-82 recession. The lack of large pay raises is why consumer spending won't stage a torrid comeback as in past recoveries.

Lagging income growth may also explain why the Board's survey of household buying plans was mixed in May. Plans to purchase major appliances were down in all categories, but intentions to buy a car were up.

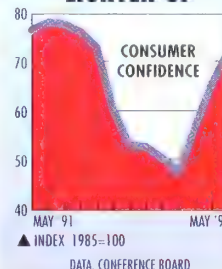
Those intentions may already have become reality, as purchases of new domestic-made cars showed a lot more pep in mid-May. New autos sold at a 6.7 million annual rate—much higher than the 5.7 million pace of early May and April's 6 million pace.

THE FED REMAINS ON GUARD

The upturn's quicker pulse hasn't gone unnoticed by the Federal Reserve or by the bond market. For now, the central bank has indicated that, barring any surprises, it will hold monetary policy steady. That means the federal funds rate—the cost of interbank borrowings—will remain at the target rate of 3.75%.

The bond market, ever wary about a radiating economy, remains a threat. Increasing consumer confidence, car sales, and durable goods, plus worries about rising

CONSUMERS LIGHTEN UP

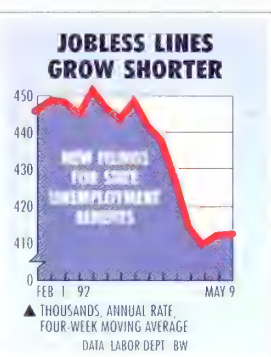


Business Outlook

oil prices, caused the yield on a 30-year Treasury bond to increase from 7.77% on May 19 to 7.91% on May 27.

Higher interest rates will slow the recovery's progress, especially in the important housing sector. Sales of existing homes were virtually flat in April, at a 3.5 million rate, down from 3.51 million in March.

The softness probably reflected the surge in mortgage rates in April. By late May, though, mortgage rates had fallen back to their low levels of late January, clearing the way for housing's second wind. If housing shows signs of slipping further, however, the Fed is likely to cut interest rates to stop an outright retrenchment.



The central bank might also move toward lower rates if the May employment report—due out on June 5—proves especially disappointing. The latest data on jobless claims, however, suggest that the labor markets are on the mend—and that consumer concerns over jobs may be misplaced.

New filings for state unemployment benefits slipped by 20,000, to 406,000, for the week ended May 9. Filings related to the Los Angeles riots accounted for 3,900 of the claims, said the Labor Dept., and more riot-related filings are likely to show up in subsequent weeks.

Even so, new claims have been trending lower since the end of March. On a four-week moving average, which smooths out weekly volatility, claims are back to their lowest level since October (chart). Fewer claims suggest that corporate layoffs, so widespread in 1991, have about run their course. That means consumer spirits should continue to brighten into the summer.

Healthier job markets would also give the Fed more room to maneuver. That's important, because the central bank is the only Washington mechanism that can sustain

the recovery. Massive deficits have all but scratched prospects for fiscal stimulus from the Bush Administration or Congress.

WATCH OUT FOR A MONSTER DEFICIT

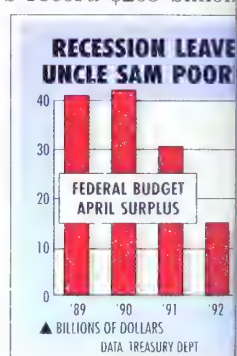
In fact, the lengthy recession has been in Washington more than ever. Sink corporate profits and job losses have slowed tax receipts, while the thrift boom and demand for social services are raising outlays.

The government was \$14.6 billion in the black in April when personal income tax payments always swell Washington's coffers. But the surplus was the smallest since the balance in four years (chart). And the meager overhang indicates that the federal budget is on track to post a deficit of more than \$350 billion for fiscal 1992—probably \$100 billion more than last year's record \$268 billion.

The recession clobbered taxes. In the first seven months of this fiscal year, total government receipts are up just 1.5% from a year ago. Personal income tax payments are flat, and corporate taxes are down some 8%. More jobs and better-looking profits should reverse these trends—but probably not until fiscal 1993 begins in October.

Meanwhile, federal outlays are up 9.7% from a year ago. Payments for government assistance programs—from Medicare to Social Security—have risen sharply from last year.

The deficit problem is why this recovery will have to muster along without any fiscal fuel. However, if consumers grow increasingly willing to spend and if new orders add life to manufacturing, then the private sector should generate enough heat to enable the economy to work up a sweat even without any action from Washington policymakers.



THE WEEK AHEAD

NAPM SURVEY

Monday, June 1, 10 a.m.

The National Association of Purchasing Management's index of business activity probably increased to 54% in May, from 51.3% in April.

CONSTRUCTION SPENDING

Monday, June 1, 10 a.m.

Construction outlays likely rose by 0.2% in April, after jumping 1.6% in March.

PERSONAL INCOME

Monday, June 1, 10 a.m.

Economists surveyed by McGraw-Hill Inc.'s MMS International say personal income likely edged up 0.2% in April, after rising 0.6% in March. Consumer spend-

ing probably increased 0.4% in April. In March, buying was up 0.3%.

LEADING INDICATORS

Tuesday, June 2, 8:30 a.m.

The government's index of leading indicators probably rose by 0.2% in April, the same small advance as in March.

NEW SINGLE-FAMILY HOME SALES

Tuesday, June 2, 10 a.m.

New homes likely sold at an annual rate of 540,000 in April. Sales plunged 14.8% in March, to a pace of just 513,000.

FACTORY INVENTORIES

Wednesday, June 3, 10 a.m.

Manufacturers probably increased their inventories by a small 0.2% in April.

That's suggested by a healthy gain in factory output for the month. In May, stock levels were unchanged.

EMPLOYMENT

Friday, June 5, 8:30 a.m.

The MMS forecast calls for a 108,000 increase in nonfarm payrolls in May. That's slightly less than the 126,000 jobs added in April, but two healthy back-to-back increases in jobs would be a sure sign that this recovery is here to stay. The jobless rate likely stayed at 7.2% in May.

INSTALLMENT CREDIT

Friday, June 5

The level of consumer credit probably changed little in April, after falling \$1 billion in March, says the MMS report.

The
Experienced
Flyer

Anyone Who Flies On Business As Much As You Do Deserves A Medallion.

When you spend as much time in the air as you do in your office, we think you should be rewarded.

On Delta, it's our
Medallion Level.

Besides giving our most frequent of flyers the special recognition they deserve, Medallion Level offers upgrades for just 2,500 frequent flyer miles.*

Substantially-reduced mileage awards. And, even better, you can use them whenever you want.†

To find out more about our Medallion Level, see your Travel Agent. Or call Delta at 1-800-323-2323.

And discover how rewarding business travel can really be.



DELTA
We Love To Fly And It Shows.

*2,500 mile upgrades are one-class and apply for travel within North America. †Award travel not subject to blackout periods. Seats may be limited. Medallion Level benefits are available to qualified travelers the calendar year following completion of the 40,000 base mileage requirement. © 1992 Delta Air Lines, Inc.

JAPAN'S SUDDEN DECELERATION

IS DETROIT WINNING BACK SHARE—OR IS TOKYO GIVING IT UP?

For so very long now, there has been but one direction for Japanese carmakers in the U.S.: up. Most years, they've added a point or two to their share of the U.S. car and light-truck market. Even last year, while Detroit's Big Three piled up a record \$7.5 billion in losses during a savage skid in sales, Japan picked up 1.7 points, to pass 25% for the first time.

Suddenly, Japanese carmakers aren't looking so invincible. As car sales have begun rising slowly, it's the Japanese who are giving up market share, surren-

dering to election-year political pressures in the U.S. and escalating costs at home. Meanwhile, Detroit, led by Ford Motor Co., is proving that value pricing and better-than-expected quality—helped by "Buy American" campaigns—are enough to get consumers at least to take a look at domestic cars. Even some former die-hard import lovers end up buying domestic wheels.

Take New York architect James K. McRobert, 41. He had never owned an American car until last October, when he compared Fords against Hondas,

Toyotas, and Subarus. He opted for roomy Taurus wagon. "I had more enough good things about the Taurus finally have the confidence to buy one," he says. Donald F. Carter, a Staten Island boat salesman, tried a Nissan for a while but bought a Lincoln last year. "I see no great difference in the overall quality of the cars," Even Nobu Kawamoto, president of Honda Motor Co., concedes: "We can see [Detroit's] aggressive attitude. We can feel it."

Month by month, the trend has come unmistakable. In the year's first four months, with overall sales running 5% ahead of last year, U.S. auto makers have won back 1.2% of the U.S. car and light-truck market, raising their share to 72.1%. The only Japanese maker to show a meaningful increase was Toyota Motor Corp. (chart). Analysts suspect that, at best, Japan's carmakers will see their share run flat this year. And if the pace of the recovery quickens in 1993, new, tightened Japanese government restrictions on exports could make it harder for the Japanese to keep up. One sign of tougher times: Some Japanese carmakers are actually going out of business. **'IT'S AN ORDER.'** For the Japanese, political pressures started with the year, at the Tokyo meeting between President Bush and Japanese Prime Minister Kiichi Miyazawa. Top Japanese auto executives in the U.S. say that Bush persuaded Miyazawa to give Detroit breathing room to get back on its feet. The response came fast: Japan's Ministry of International Trade & Industry started pressing carmakers to raise prices. "We're encouraging them not to pursue market share so aggressively," says Norihiro Kono, deputy director of MITI's auto division. "We can't tell them what to do, but we are suggesting that they raise prices, lengthen model cycles and decrease their working hours."

Toyota denies bowing to MITI's pressure. But within weeks, it hiked prices in the U.S. an average of 3.2%, and 5% on its luxury Lexus models. Not even

ONLY TOYOTA'S GROWTH IS STRONG

SHARE OF U.S. PASSENGER-CAR AND LIGHT-TRUCK MARKET



STUCK IN LOW GEAR: TOKYO WILL HOLD EXPORTS TO 1.65 MILLION—LESS THAN LAST YEAR

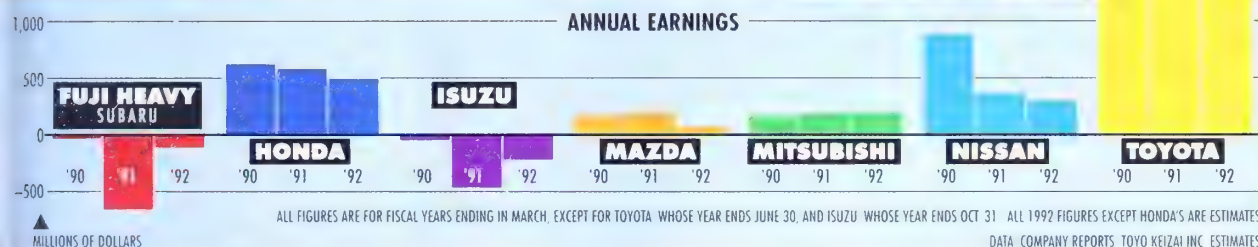
SIGN OF TOUGH TIMES: SOME JAPANESE CAR DEALERSHIPS HAVE
GONE OUT OF BUSINESS—UNTIL RECENTLY, A DISTINCT RARITY



WELCOME TO
TOYOTA
OF
DUARTE

3,395 3,319
2,308

JAPAN'S CARMAKERS FEEL THE PINCH



With earlier, the company had posted usual midseason price increases, averaging about 1.5%. Other Japanese carmakers quickly followed with more moderate price hikes.

Then, on Mar. 19, MITI dropped the price shoe. Under the long-standing Voluntary Restraint Agreement with the U.S., Tokyo lowered its cap on car exports this year by 28%, to 1.65 million—down from the 1.76 million cars Japan exported to the U.S. last year. "That's more than pressure. It's an order," says frustrated Kenichi Kato, the Toyota managing director who oversees North American operations. "If we violate the agreement, we will be punished."

Meanwhile, the Bush Administration is coming to Detroit's aid at home. The Senate House "will use every available administrative means to help," contends a U.S. executive with a Japanese carmaker. The Commerce Dept. already has threatened that Mazda Motor Corp. and Toyota were dumping minivans in the U.S. and levied punitive tariffs of up to 25% on the vehicles. A review of that ruling by the U.S. International Trade Commission is due by July 2. If it goes against Mazda and Toyota, the companies would be forced to raise prices on their vans. Now, Japanese auto executives say that Congress may go back to applying the U.S.'s 25% duty on imported

trucks to hot-selling sport-utility vehicles—which would clobber Nissan's Pathfinder and Toyota's 4Runner.

With Japan's own car market slumping, the financial pressure on Japanese carmakers is building. MITI is pushing them to cut the hours their workers put in each year at the same time that they're grappling with a labor shortage. The stronger yen is squeezing revenues. And collectively, Japan's auto makers must refinance at higher rates some \$6 billion in low-interest convertible bonds they sold during the Tokyo market's boom. Toyota has just floated a \$1 billion Eurobond issue at an interest rate of nearly 7% to redeem \$800 million in bonds paying just 1.25%. Nissan must refinance \$1.5 billion in cheap debt next year, presumably at far higher rates.

MIGRATING UPSCALE. It will take at least a couple of years for Japan's carmakers to deal with all these problems. For one thing, most can't respond to tighter import allowances by revving up their U.S. factories overnight. Some plants—such as Toyota's in Georgetown, Ky.—are already running at full tilt. Toyota won't complete a doubling of the plant's capacity, to 400,000 cars a year, until 1994.

And many popular Japanese models aren't produced in America, so Japan's carmakers will have to juggle which models they import and allocate how

many of some models are shipped to each dealer. Moreover, Japanese carmakers concede that their U.S. production costs are higher than in Japan. That, coupled with other cost pressures, may force them to keep U.S. prices up. "The bottom line for consumers is, the product they want won't be available, or [will be] available at a higher price," says Clark J. Vitulli, senior vice-president of Mazda Motor of America Inc.

Longer-term, the Japanese conquest of the U.S. car market almost certainly isn't over. Japanese companies will continue their move upscale into selling more high-margin models, predicts John H. Hammond Jr., a partner at market researcher J. D. Power & Associates Inc. Detroit's gains, he says, will come mainly from cheaper, low-margin products.

The Japanese also are likely to channel future U.S. investments into research centers, not factories. The result: stand-alone auto companies able to take a car from drawing board to showroom. That's why some Japanese executives aren't ready to concede that Detroit is making a comeback. "There's not a clear turning point yet," says Honda's Kawamoto. He and others expect eventually to be back in high gear. But right now, Detroit has a chance to regroup.

By Larry Armstrong in Los Angeles, and Karen Lowry Miller in Tokyo

Commentary/by Paul Magnusson

FREE TRADE: THE U.S. SHOULDN'T PLAY PURIST

Nothing annoys U.S. Trade Representative Carla A. Hills quite so much as the suggestion that she thinks governments should play a role in carving up global markets. She once yelled at a group of startled reporters: "Is there anyone here who believes that I favor managed trade?" That morning, a newspaper headline had implied exactly that.

While Hills's comments are usually more polished, her outburst did reflect the Bush Administration line: "We're

anese share of the U.S. car market.

The Administration's talk of free trade isn't mere lip service. The U.S. has led the world through 50 years of international trade talks that reduced tariffs tenfold. But "when there is enough political pressure, we deviate from our rule of 'follow the marketplace' and we cut a deal," notes American University economist Stephen D. Cohen. For example, Bush got Tokyo to agree to limit exports by its subsidized steel industry to the U.S.

home to Delta, United, or Northwest

Consumers are rightly suspicious of managed trade. But it does have its place—particularly when foreign industrial policy threatens competitive U.S. industries. Take the massive European subsidies to aircraft maker Airbus Industrie. For all its lectures to Britain, France, Germany, and Spain about the wonders of free trade, the Bush Administration could do little to slow the Airbus juggernaut, which recently overtook McDonnell-Douglas Corp. as No. 2, after Boeing Co., in sales.

RECIPROCITY. Purists want the U.S. to stand as an unwavering preacher of the free-trade gospel. Trouble is, that was easier to do when America dominated the global economy. When the airlines of every nation seemed to consist of Boeing and Douglas jets, Washington could pretend that there was a free market in aircraft. Alas, that's no longer possible. "The question is not if there will be managed trade, but will it only be in Brussels and Tokyo and not Washington," says Clyde V. Prestowitz Jr., president of the Economic Strategy Institute, a Washington think tank. To counter the Airbus threat, Washington may have to offer Boeing's customers the same kind of cut-rate financing that Airbus gives its buyers.

An effective and flexible trade policy can be based on reciprocity and still be fair-minded. Brazil and India, where foreign investment faces near-insuperable barriers, shouldn't expect unfettered access to the U.S. market. Thailand and the European Community, among others, wrap imports in layers of red tape. They should face similar treatment from the U.S. unless they reform. The U.S. can neutralize direct government aid to foreign industries by giving American companies favorable financing from the U.S. Export-Import Bank or by imposing countervailing duties on offending imports.

It's not yet time to throw out the economic textbooks. Free trade remains the ideal. But when foreign governments handpick industries for development, subsidies, or home-market protection, it's time to get practical. As a former Justice Dept. antitrust lawyer, Hills must hate the idea of assigning market shares. But until all trading nations adopt the Golden Rule, managed trade remains a necessary evil.



all free traders here." That commitment to free and open markets everywhere, while sincere, is honored more in the breach than in observance: As citizens of the real world, President Bush's trade negotiators know they can't always abide by Adam Smith.

REALPOLITIK. The fact is, most governments, including Washington, meddle in global commerce in a hundred different ways. The latest U.S. plunge into managed trade came on May 18, when Detroit's Big Three met, with the Administration's blessing, behind closed doors in Chicago with Japan's Big Five carmakers. Officially, car moguls were discussing the sale of more U.S. cars in Japan and the increased purchase of U.S.-made parts by Japanese transplants. But it's hard to believe that they didn't also discuss the proper Jap-

Managed trade can also chip away at other countries' stubborn protectionism. Japan is notorious for shutting out foreign semiconductors, despite its agreement, hammered out with the Bush and Reagan Administrations, to reserve a 20% share of its market for foreign chips. How to get Tokyo to stick to its deal? Managed trade. Even Hills thinks so: On May 27, she chided Japan and called for a U.S. review of the semiconductor agreement.

Sometimes, simple common sense demands managed trade. International landing rights at U.S. airports are negotiated on a reciprocal basis with competing nations. Otherwise, chaos would result, as dozens of foreign airlines—many government-owned, please note—would flood the U.S. with cut-rate flights, while denying access at



NETIC CLEANUP? A CALL FOR \$75 BILLION IN NEW AID—AND OFFERS FOR ONLY \$6 BILLION

THE LONG ROAD FROM RIO

At the summit won't address: Goals, timetables, and compliance

Only the results could be as spectacular as the spectacle. By June 3, at least 30,000 delegates, heads of state, assorted hangers-on will have descended on Rio de Janeiro for the U.N. Conference on Environment & Development (UNCED)—the most ambitious global summit in history. So high-profile is the conference that Brazil has spent millions to spruce up the city—rebuilding the airport, paving streets, cleaning up roadsides, and fencing in areas to keep the homeless away.

Unfortunately, it's not clear that the summit's outcome will be any less costly than Brazil's cleanup. Delegates from 166 countries will tackle an overwhelming array of issues in 12 days, from forest destruction to world poverty. More than 100 national leaders plan to show up for the meeting's last three days almost certainly will sign treaties aimed at addressing global warming and protecting the world's resources. They're also likely to adopt Agenda 21, an action plan to curb environmental destruction and promote sustainable development. Yet few of the leaders have shown the political will to put their issues into effect once they get home.

TIMING. The overarching problem: The issues pit rich nations against poor nations and create unprecedented demand for new aid at a time when the global economy is sagging. The result: Intense pressure from the U.S.,

diplomats in the two years of talks leading up to Rio hammered out a set of pre-negotiated agreements that have no goals, timetables, or penalties to ensure compliance.

Take, for instance, the pending treaty on global warming. It calls for voluntary efforts to stabilize emissions of greenhouse gases at 1990 levels, which "doesn't really mean anyone has to do much," says one U.S. official. Nor does

DON'T BLAME IT ON RIO

Whether the agreements to be signed in Rio are successful depends on what happens after the conference ends. Here's what's needed:

MONEY

Industrial nations need to commit \$6 billion each year in new aid to poor nations

MUSCLE

The United Nations must sponsor a powerful agency to monitor progress

PRIORITIES

Initial action should focus on programs that can be implemented quickly and that set the stage for real change

PRESSURE

Progress depends on building public support for the program

DATA BW

the conference directly address population growth, the chief culprit in the environmental destruction and poverty that plague developing nations.

Moreover, it's still not clear how Agenda 21 or the treaties will be financed. That's to be hammered out at the meeting, along with other volatile issues, including the conditions under which rich nations will transfer technology to poor ones. Getting consensus on the financial issues alone, not to mention all the other outstanding matters, will be tough. Says the conference chairman, Singapore Ambassador-at-Large Tommy Koh: "My expectations are very low at this point."

To make Agenda 21 work, it will be critical to find cash fast. Putting the 120 programs that make up the plan into effect would require \$125 billion in annual aid to developing nations—\$75 billion more than they receive now. Without additional funding for industrial and agricultural development, family planning, and the like, the Third World is unlikely to keep the bargains struck at the conference. And delegates say world leaders will come to Rio with plans to commit no more than \$6 billion in fresh aid—barely enough to begin the process.

WHO'S IN CHARGE? Even money won't guarantee results if conferees don't create a powerful body to monitor Agenda 21's progress. The U.N. will get the job, but that's where consensus ends. Sweden, the U.S., and others favor revitalizing the U.N. Economic & Social Council to do it. Other nations want to create a new, high-level commission that would report directly to the General Assembly and have the clout to set priorities.

Even the conference's one certain success—the avalanche of publicity surrounding it—threatens to leave damaging effects. "The danger in Rio," warns Senator Albert Gore Jr. (D-Tenn.), "is that publics around the world will be fooled into thinking substantive action has taken place."

It's too early to tar the Earth Summit as an abject failure. Rio is a historic first step that will push sustainable development—a concept aimed at integrating economic development with environmental protection—toward the top of the international agenda. The conference will also lay the foundation for stronger agreements in the future. "Rio is more the beginning of a long process than the end of the road," says Marcos de Azambuja, Brazil's chief UNCED representative. How long it takes to get down that road may depend on how much pressure citizens put on governments to turn conference hype into measurable progress.

By Emily T. Smith in New York and Geri Smith in Rio de Janeiro, with Ruth Pearson at the U.N. and Peter Hong in Washington

CHRIS GETS HIS MAN. NOW, CAN WHITTLE GET GOING?

It's counting on Yale's president to make a private-school plan reality

Even for one of the most persuasive entrepreneurs in mediacore, it was a breathtaking coup. On May 25, Christopher Whittle announced that Yale University President Benno C. Schmidt Jr. would forsake his lofty academic perch to head one of the riskiest projects Whittle has undertaken: a national chain of for-profit schools.

The high-profile hire couldn't have come at a better time for Whittle. His Knoxville (Tenn.)-based company, Whittle Communications, has been struggling with lower profits and pressure from some of its key backers. Time Warner Inc., which owns 37.5% of Whittle, says it has urged Whittle to focus on electronic media instead of its traditional mix of narrowly targeted magazines and TV services. And Dutch consumer-electronics giant Philips, which owns 25%,



WHITTLE: UNDER PRESSURE

\$230 million, for the year.

Whittle has been hurt by the ad recession. But Time Warner executives say he also has been distracted by his many new projects, which include Channel One, a satellite service that beams current-events programming and ads into 10,000 high schools, and the Special Report Network, a TV and magazine service for doctors' offices. "He had so much going on that the focus was getting blurred," says Reginald K. Brack Jr., chairman of Time Inc.

Whittle's restructuring is part of his plan to phase out much of the print business in favor of electronic media and the schools projects. Whittle also is scrapping Highway One, a video service for shopping malls. Now, most of the company's sales come from Channel One, which is growing rapidly but has had a stubborn image problem. What's more, a

Whittle will spend an initial \$60 million in research and development on the Edison Project but is fuzzy about how plans to raise the rest of the money. "We have to come up with a business plan that has limited risk in it that will attract investors," he says. "I'm still working on that." Some educators say he may use advertising-based media to help support the schools.

RELENTLESS. But Whittle says he will court venture capitalists, banks, and other investors. That's where Schmidt comes in. The 50-year-old former law professor and a deft fund-raiser. During his tenure at Yale, the school's endowment grew faster than any other private university's, jumping from \$1.7 billion in 1986 to almost \$3 billion today. Yet his stay was marred by battles over how to close Yale's \$15 million budget deficit. "It's a little bit like presiding over the Roman Empire at the end of stress," says writer Calvin Trillin, a member of Yale's governing board.

Another big reason Schmidt signed may have been Whittle's relentless pursuit. He says he met with Schmidt more than 30 times to push the idea after the two met at a New York dinner party two years ago. There was one more hurdle. A banker close to the company says the deal was based on the salaries of Whittle's other top managers, Schmidt could earn upwards of \$800,000 a year, compared with \$240,000 at Yale. Both Schmidt and Whittle decline to comment.

WHITTLE'S LEARNING CURVE

1991

OCTOBER Forstmann Little backs away from talks to invest \$350 million in Whittle

1992

FEBRUARY Philips Electronics pays \$175 million for 25% of Whittle

APRIL A University of Michigan study finds that kids who watch the Channel One classroom newscast are only slightly more aware of current events than those who do not

MAY 13 To boost profit margins, Whittle announces a corporate overhaul, laying off 100

employees, forcing executive pay cuts, and eliminating some print and electronic media ventures

MAY 25 Yale University President Benno Schmidt signs on to head the Edison Project, Whittle's for-profit school venture

DATA COMPANY REPORTS

has instilled in Whittle a "new consciousness" about costs, according to a former Whittle executive.

Just two weeks ago, Whittle announced the first major cuts in its 21-year history, laying off 100 and trimming executive salaries. The privately held company won't disclose earnings, but both Whittle and Time Warner say they're unsatisfied with fiscal 1992 results. "Our margins were average, and we think they should be among the best in the industry," Whittle says. The company says revenues rose 11%, to

recent study by the University of Michigan found that the programming didn't do a whole lot to boost current-events knowledge among its student viewers.

Such setbacks haven't deterred Whittle from his plan to open 200 for-profit schools by 1996. He hopes to raise \$1.2 billion for them and says he may offer eight-hour days and 11-month school years. Tuition isn't supposed to top the average spent by public schools—now \$5,500 a student. "This is a rare instance where it's possible to design a new educational institution," says Schmidt.



SCHMIDT: HIS FUND-RAISING TALENTS WILL BE ESSENTIAL

The Edison Project isn't the only venture on the company's plate: Whittle plans to announce a new medical broadcast service soon but won't give details. Outsiders speculate that it will be aimed at physicians and supported by pharmaceutical advertising. But that's nothing next to the Edison Project. With its high cost and high ambitions, Chris Whittle's future may well be in the hands of his illustrious new employee.

By Walecia Konrad in Atlanta, with Mark Landler in New York and David Driscoll in New Haven

HUMANA MAY BE WEARING TOO MANY HATS

ng a hospital chain and a health insurer has the bottom line ailing

Humana Inc. wanted to have all the bases covered. Back in 1984, the hospital operator launched a strategy to take on the role of health-insurance provider as well. The plan: Humana the insurer would provide Humana the hospital company with a steady flow of patients for its beds. During the past few years, the integrated strategy worked well. Humana sold health coverage to some 1.7 million people, even as the hospital business prospered. Recently, though, something has gone wrong. On May 20, for the first quarter in a row, the Louisville-based company warned Wall Street that profits won't meet expectations. For the quarter ended March 31, Humana announced, its profit might be off by as much as 5% from the year-ago quarter when it earned \$101 million on revenues of \$1.6 billion.

PROFIT DROP. Humana's biggest problem lies on the hospital side of its operations. After all, hospital margins have been under pressure for years, as government reimbursement schemes have been slashed, and cost-cutting managed-care plans have proliferated. This year, it isn't just slowing growth that Humana has to worry about. Profits are actually falling. In the first half of fiscal 1992, Humana's hospital operating income fell 6% from the first half of 1991, to \$294 million. Revenue during the period, however, rose to \$2.07 billion. Partly behind the profit drop, Humana says, is a decline in admissions among paying patients—privately insured members who make up for the lower rates paid by those on publicly funded or other discounted health plans. Partly, the higher-margin patients are frightened off by a flood of negative news reports in 1991, which accused Humana of overcharging for services. The charges led Representative D. Dingell (D-Mich.) to hold hearings on the topic. Humana consistently maintained that its billings were quite competitive.

Not so at fault, Humana says, is the nation's sluggish economy. But the company concedes that it's not quite sure what has caused its business to tail off

and says it has launched a market-research study asking doctors, patients, employers, and others why key volume indicators are dropping.

Tougher competition for insurance clients has complicated the earnings picture by making it more difficult for Humana to keep adding to its enrollment.



JONES: IS HIS VERTICAL INTEGRATION SCHEME WORKING?

But some outsiders think that there's a basic conflict in the company's strategy of integrating hospital care with the health-insurance business. Humana's need to exert tight control over its insurance payments has rubbed doctors the wrong way, analysts say. To retaliate, doctors are referring their patients to other hospitals, leaving Humana to fill its beds with more patients covered by lower-paying health insurance. "Humana is stuck with an increasingly discounted base," says Margo L. Vignola, a Salomon Brothers Inc. analyst.

Humana's integration strategy has left it vul-

nerable to problems such as competitors as Nashville-based Hospital Corp. of America don't face, analysts say. Health care stocks in general have been sickly, but investors are clearly worried about the turn of events at Humana. Since peaking in late January above 29, the stock is now trading around 21. "This is the bed [Humana] made," Vignola says, "and now they're lying in it."

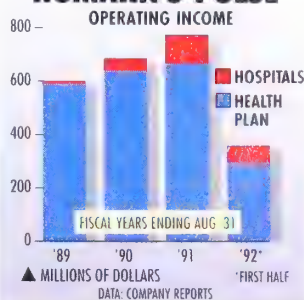
STILL THE BOSS. The problems have put Humana co-founder and Chairman David A. Jones on the spot, just as three of six executive vice-presidents, including Chief Financial Officer and Director William C. Ballard Jr., announced early retirements. Their April resignations follow the death last year of Humana co-founder Wendell Cherry. Director John W. Landrum says none of the retirements will have a negative impact on the company, and analysts and company insiders point out that key operating management remains in place. Jones "was always the one who ran the show," Landrum says. "He's always had his thumb on everything and continues to."

Making matters more awkward, though, the earnings problems and the management upheaval come just as Jones was looking to spend more time in Washington. Beginning next January, he takes over as chairman of the Healthcare Leadership Council, a potent coalition of about 50 health care industry CEOs. The lobbying group's agenda: to fight against a Canadian-style national health insurance plan and to push for private-market solutions. In a statement, Jones has told employees that this "will in no way detract from my primary duty as Humana's CEO." And with some 3 million shares of stock, he's hardly likely to walk away from the company and its problems.

To deal with its woes, Humana says it will put together a plan once the market-research study is done. Selling some of the company's hospitals may be an option. But if Chairman Jones is going to wield a scalpel on the vertical integration strategy, he hasn't given any sign. Says director Landrum: "We need to hold steady in the boat." In any case, Jones now has considerably more on his mind than how to reform health care in America.

By Zachary Schiller in Cleveland, with bureau reports

HUMANA'S PULSE



THE AIRLINES ARE KILLING EACH OTHER AGAIN

American says its new prices are boosting travel—but few agree

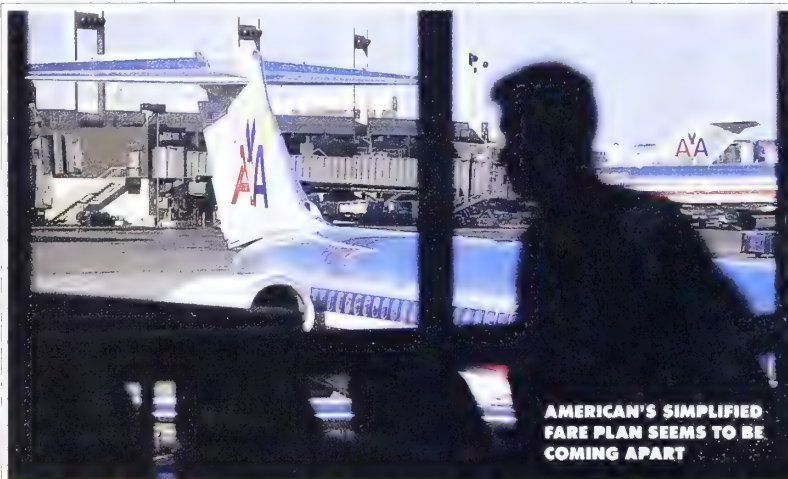
American Airlines Chairman Robert L. Crandall has a favorite line he uses to describe 1991. "The only heartening thing we can say is that it's over." For airlines especially, that year, complete with war and recession, was hateful. The carriers that survived lost a staggering \$1.6 billion.

Trouble is, 1992 may be bringing more of the same. While weaker carriers are still waging costly fare wars in many markets, most airlines say they've yet to see any increase in traffic. And the simplified fare structure that Crandall tried to force on the entire industry is shaky: The latest crack in the plan came on May 26, when Northwest Airlines Inc. unveiled a family discount. The next day, attempting to defend its structure, American matched Northwest by halving the price of its cheapest advance-purchase tickets. To top it all off, rising oil prices, always an industry wild card, threaten to obliterate any hope of a financial rebound. "No question," declares an executive at a major U.S. carrier. "We're getting squeezed." If fuel prices rise, "we won't show a recovery this year."

NO STAMPEDE. Earlier this year, Crandall attempted to wrestle his airline, at least, into recovery. In April, he announced with great hullabaloo a plan to replace the industry's labyrinth of ever-changing fares with a set of only four fares per route. He predicted the simplified system, with sharply lower full-coach fares, would boost travel and revenues. It's still only a prediction.

The biggest problem is that lowered fares haven't provoked a stampede to the ticket counter. When American introduced the new structure, says A. H. Ko-

lakowski, senior vice-president for sales at Delta Air Lines Inc., "they said one factor that would make it a success would be if it stimulated new traffic. That hasn't happened so far." American says demand is strong and more fliers are paying full-coach fares, but Continental and USAir say they've seen no pickup in business since matching American's plan. It may take until after Labor Day to judge whether the fares generate



AMERICAN'S SIMPLIFIED FARE PLAN SEEMS TO BE COMING APART

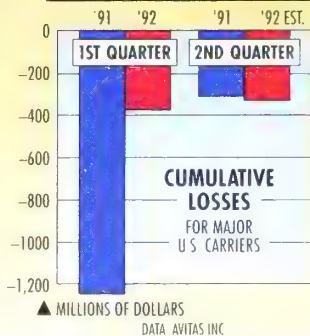
FARES ARE STILL SAGGING...

REPRESENTATIVE ONE-WAY FULL-COACH FARES

Route	Before fare simplification	After 4/13	Interim 5/1	Most recent 5/26
DALLAS-NEW YORK	\$595	\$360	\$300	\$310
WASHINGTON-CHICAGO	427	250	250	250
NEWARK-ORLANDO	511	390	390	390
NEW YORK-LOS ANGELES	752	460	350	400
CHICAGO-SAN FRANCISCO	710	410	300	310

DATA: AMERICAN EXPRESS TRAVEL RELATED SERVICES CO.

...HURTING AIRLINES' PROFIT HOPES



new business. But Kolakowski and others remain dubious.

Moreover, American, instead of establishing pricing discipline, set off a free-for-all. Weaker carriers such as Trans World Airlines Inc., operating under protection from creditors, started beating American's fares as soon as they were announced. Crandall's original plan dropped standard coach fares by at least 38%. TWA responded with a promise to

undercut American by 10% to 20%. That set off a scramble that dragged prices down a further 10% to 25% industry-wide, leading analysts to downgrade second-quarter estimates for many carriers. Most are expected to report losses (chart).

With the economy still weak, the wars show no sign of abating. In last week of May, the industry managed to nudge prices up in about 1,500 markets. But that boost, pushed through when TWA's six-month-old business-saver fares expired, merely restored prices to their levels of mid-April. It's probable that TWA or another carrier will still introduce new cuts. If demands remain weak, the rest of the industry will have to follow.

'BACKLASH.' Even the promised fare simplification may not survive the year. On major routes, such as New York-Los Angeles, passengers are still confronted with a maddening array of fares as many as 9 on American alone. And major carriers are under intense pressure to restore corporate accounts to high-volume customers. "We're seeing a backlash," says Kolakowski. If carriers buckle, a basic principle of the new fares may have been destroyed.

That means that even without a spike in oil prices, chances for a profitable 1992 are slim. Before it dawned on oil markets that Saudi Arabia was setting aside its traditional role as OPEC's leading advocate of moderate prices, airline analysts had reduced industry profit estimates from \$1 billion to break-even. Now, assuming a price of \$3 per barrel in 1992, Airlines Economics Inc. on May 27 sharply downgraded its industry forecast, predicting a loss of up to \$1 billion for U.S. carriers in 1992.

OPEC is a notoriously undisciplined cartel, and some of its members are likely to produce more than their quota, even if the price per barrel doesn't soar to the full \$3, to \$23, that many fear, airlines may wind up remembering as the recovery that wasn't.

By Wendy Zellner in Dallas, with bureau reports



"Baptist Medical Center is an acute care hospital with 572 beds...and we treat about 100,000 patients a year. Our medical records department works 24 hours a day to transcribe doctors' reports and keep our patient records up to date."

"So we can't afford to be out of service for even a few hours. Which is why we were looking for a dictation system that was reliable...that offered us room for growth...and that gave us the service we needed. Dictaphone was head and shoulders above the rest."

"Today, we process routine physicals and medical histories in four hours, instead of 48 hours. And it's all because of our Dictaphone system."

"I would strongly recommend Dictaphone. They offer outstanding service and support."

At Dictaphone, a Pitney Bowes company, customer satisfaction is a commitment that's at the very fiber of our business. It shapes the attitudes and actions of our people. And it's reflected in the quality and reliability of our products. What's more, we back it up with our Customer Satisfaction Guarantee.™ For more information, call 1-800-MR BOWES ext 1045.

"We've reduced the transcription time for doctors' reports from 48 hours to 4...and I give Dictaphone 100% credit."

June Bass
Director, Medical Records
Baptist Medical Center
Jacksonville, Florida

 **Pitney Bowes**

Dictaphone, A Pitney Bowes Company
Stamford, CT 06926-0700
Telephone: 1-800-MR BOWES

Postage Meters • Mailing, Shipping, Copying, Dictation, Facsimile and
Code ID Systems • Facilities Management • Equipment Leasing

COORS IS THINKING SUDS 'R' US

It's spinning off its nonbeer businesses to concentrate on brewing

Diversification at 119-year-old Adolph Coors Co. started early. Adolph Coors Jr., son of the founder, plunked down \$15,000 in 1912 to bail out a failing pottery company. Over the next eight decades, Coors and his descendants invested more than \$800 million in a hodgepodge of nonsuds businesses. Today, the company that brought America the Silver Bullet also sells ceramic multilayer computer boards, packages for soaps and dog food, vitamins for animal feed, and 11 different parts for Chevrolet Corvettes. But all those will fall away if the brewer moves ahead with plans, announced at its May 14 annual meeting, to spin off its nonbeer activities to shareholders.

There's no one reason for the planned separation. Analysts had long groused that they couldn't determine Coors' real worth when 30% of its \$1.9 billion in overall sales came from a grab bag of operations. And Wall Street never warmed to the erratic earnings and frequent write-offs at the aluminum and energy division. Investor concern over those businesses, the Coors brain trust believes, has helped keep its stock stuck around 18—about two-thirds of book value—for weeks prior to the May announcement.

But the spin-off is more than a ploy to please outside investors. It's also a recognition that the brewer's core business faces a stiff test. It's still a distant third to giants Anheuser-Busch Cos. and Philip Morris Cos.' Miller Brewing, and gaining ground will be costly.

SILVER-SHEATHED. For the past decade, the company's growth has been fueled largely by sales of its lower-calorie Coors Light brand. Launched in 1978, the silver-sheathed brew accounts for nearly two-thirds of the 19.4 million barrels that Coors sells domestically, according to industry newsletter *Market Watch*. But the publication says that Coors Light was overtaken last year by Bud Light and still trails category leader Miller Lite by a healthy margin. Sure, Coors boosted unit sales of beer in

1991—but by only 1.2%, and it had to boost advertising 9%, to almost \$300 million, to score that small gain.

Hefty advertising, along with a five-year, \$738 million program to upgrade its brewing plants, dragged down Coors' operating earnings (chart). Last year, beer earnings fell 69%, to \$59 million, despite a 4% rise in sales, to \$1.5 billion. Overall earnings fell by 34%, to \$25.5 million, on a 5% hike in sales. The goal now is to build "critical mass," says Peter H. Coors, the founder's great-grandson and president of Coors Brewing Co. That means doubling market share, now at 10.3%, he says, putting it

closer to Miller Brewing Co.'s 22% and Anheuser-Busch's 43.5%. "And to that, we're going to have to sharpen spears."

How will splitting the company into two pieces accomplish that? For one thing, it will make it easier for rating agencies to get a handle on separate companies' balance sheets that could allow the brewing unit to tap the bond market for capital to buy up two smaller and less robust competitors, Stroh Brewery Co. or G. Heileman Brewing Co. "That's not why we're doing it," insists Coors, whose company backed out of a 1989 deal to buy Stroh. But he quickly adds: "I've learned not to say never."

FRUIT FLAVORS. Without the high-tech technology lines, Coors could focus more on pushing its line of new and repositioned brands of beer. In late 1989, the company introduced two medium-priced brands, Keystone and Keystone Light, which together sold an impressive 2.3 million barrels in their first 12 months. And

raising the profile of its premium-brand Coors Extra. This year, the company also came out with a fruit-flavored beer cooler. "Even critics say that these guys know how to make a good beer," says St. Louis-based industry consultant S. Weinberg, a former Anheuser-Busch executive. "But their problem has always been getting that product across."

Whether the proposed spin-off will improve the company's marketing efforts remains a big unknown. This is still a young company, critics say, that is late into the market for beer and until the early 1980s rarely advertised on national television. Indeed, the company sharply cut back advertising

recently for their oldest brand, Original Coors, whose sales have faded in recent years.

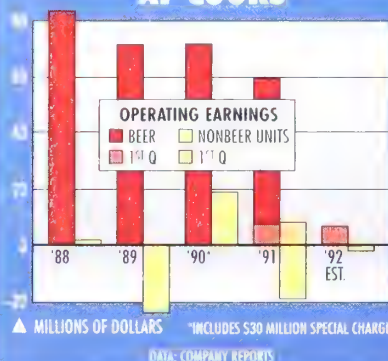
If nothing else, the Coors family stands to make money if the spin-off is completed later this year as planned. The clan now owns 55% of the parent company's outstanding stock and would own the same percentage of each of the newly created companies. Peter would continue to run the brewery, while two of the founder's other great-grandsons, Jerry and Joseph, would help run the nonbeer unit. The real Rocky Mountain high would come if the two companies, if parted, got Wall Street buzzed.

By Ronald Grover in Los Angeles



PETER COORS: "WE'RE GOING TO HAVE TO SHARPEN OUR SPEARS"

TRUBLE BREWING AT COORS



Meet the family nobody will insure.

He worked hard to learn his trade. He has a good paying job. Yet his family is denied the health insurance most of us take for granted.

Soaring costs forced his employer to drop their group plan. And when he applied on his own, he was turned down because he has a heart murmur and she has high blood pressure.

Their plight is all too common. Millions of Americans are considered "medically uninsurable" due to preexisting health conditions.

The 300,000 member physicians of the American Medical Association think this is wrong. We believe no person should be denied access to our health care system. Affordable health insurance must be made

available to *all* individuals, regardless of preexisting conditions. And tax incentives must be created to enable small business to provide the same group coverage as larger companies.

Most people in this country *do* receive high quality health care. But the system *must* be improved. And we have a proposal, called Health Access America, that will reduce costs while preserving the quality of our system and individual freedom of choice.

Health insurance reform is just one of the points in this proposal. If you would like to learn more about Health Access America, write Dr. Jim Todd, Dept. 402, American Medical Association, 515 North State Street, Chicago, IL 60610, or call us today at **800 621-8335**.

American Medical Association

Physicians dedicated to the health of America



THESE BABY DOLLS REALLY DELIVER

Toyland's latest hits give anatomical correctness a new meaning



Dolls, these days, do some pretty amazing things: They walk. They talk. They turn from a whiter shade of pale to a Malibu tan. Filled with hot water, they can feel all wiggly and warm like a real baby. They can even roller skate—if you feed them a handful of C batteries. But a pregnant doll?

It may be the most unlikely and controversial toy hit of 1992: Called The Mommy-To-Be Doll, this 11½-inch figure comes with a protruding abdomen that lifts off to reveal a baby boy or girl—anatomically correct, of course. The mommy, however, is not: Remove the baby, and her flat stomach instantly pops back into place. No stretch marks!

PUPPY LITTER. Since introducing the doll last August, Danish toymaker Villy Nielsen has sold more than 1.5 million in Europe. Its exclusive U.S. distributor, Judith Corp., in Lake Forest, Ill., has been struggling to keep up with demand. F. A. O. Schwarz's 26 stores started selling the toy—at \$20 apiece—on Mother's Day and ran out of stock twice in the first week. Says Senior Buyer Ian McDermott: "It's doing far better than we ever imagined."

Mommy-To-Be won't be the only toy to visit the maternity ward this year. Hasbro Inc.'s Puppy Surprise is a stuffed dog whose Velcro-sealed tummy opens to reveal a litter of three to five

puppies. First appearing in late 1991, Puppy Surprise has bounded into the top 10 on toy charts. Hasbro plans to add Kitty Surprise later this year. At \$30, Puppy Surprise alone could fetch \$50 million to \$100 million in sales this year, figures Paul Valentine, toy-industry analyst at Standard & Poor's Corp.

For 4-year-old Kara Edmark of Mundelein, Ill., the appeal of Puppy Surprise has less to do with pregnancy than with

surprise. Kara couldn't wait to find the size of her litter. "I really wanted because I thought I was going to five puppies," Kara confides. Five was: Holly, Michael, Ariane, and two be named later.

BIRDS AND BEES? Not to be outdone, Mattel Inc. will roll out Bundle Baby, the end of summer. The toy, expected to retail for more than \$30, features a heart-shaped button. Stephen Sandberg, president of distributor Sanco Toys, thinks Mattel could sell as many as half-million Bundle Babies.

Like Mommy-To-Be, the Bundle Baby is one of the "reality-based" dolls that have helped revive the \$1.5 billion market in recent years, notes Valentine. Not everyone appreciates Judith's take on reality. "With teen pregnancies, we may be sending the wrong message," frets Mary Flaherty, a Los Angeles mother of two who expects a third child in June. Others are outraged. "Are we trying to create another generation of breeders?" fumes Barbara Otto, program director at 9 to 5, National Association of Working Women. Judith President Egil Wigert replies: "I don't think we're promoting pregnancy." Alexander Sanger, president of Planned Parenthood of New York City Inc., thinks the toys give "parents an opportunity to discuss reproduction with their children."

Maybe adults shouldn't worry much—a new fad may render "reality" toys obsolete. Already, kids are snapping up a '60s throwback: trolls. Sales of these squat, spiky-haired uglies could surpass those of Teenage Mutant Ninja Turtle action figures at their 1990 peak of \$400 million, says Valentine. That's the kind of reproduction toymakers love.

By Lois Therrien in Chicago

PRIVACY

THE RUSH TO KEEP MUM

Pressure from consumers has companies tightening privacy protections

This August, American Express Co. will at last reveal the whole truth. Under a settlement with the New York State attorney general, the services giant will disclose, in a mass mailing to its 25 million cardholders, that for years it has been sorting their transaction records by spending patterns, and then renting name-and-address lists to everyone from stores to insurers.

Chalk up another one for the privacy brigade. Under pressure from consumer-

advocacy groups, American Express is just one of many U.S. companies cleaning up their acts when it comes to protecting the privacy of consumers and employees (table, page 38). "I don't know too many companies that are just standing pat," says Columbia University privacy expert Alan F. Westin.

Forcing this change is a dawning consumer awareness of marketing and technology. Software advances make it a cinch for companies to paint alarmingly

**LIMITED
TIME OFFER**
MS-DOS™ 5.0 &
Windows™ 3.1
included on all ALR
Flyer 32LCT and
Flyer 32DT hard
drive models.



Did Your Last Relationship End Because You Needed More Space?

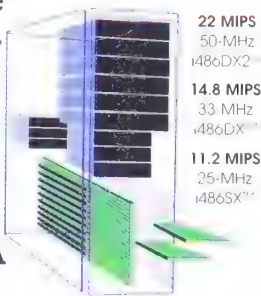
Before, the two of you got along fine in the beginning. Then your needs changed, you wanted more... and before you knew it, you'd completely outgrown your old PC. Well, don't be discouraged, because now there's a system that won't cramp your style.

Introducing the ALR Flyer 32LCT

The **Flyer 32LCT** gives you the expandability you'd expect to find in a full-featured tower system at the type of price you'd expect to pay for a desktop PC.

Starting at... **\$2,295**

With twelve drive bays, ten industry standard expansion slots, built-in super VGA graphics, it's



22 MIPS
50-MHz
i486DX2
14.8 MIPS
33 MHz
i486DX
11.2 MIPS
25-MHz
i486SX

the perfect system for growing networks or expansion hungry single users.

The Flyer 32LCT can even keep pace with your changing power requirements. When you outgrow the Flyer 32LCT's current processor, you simply plug in a more powerful one. **Just Upgrade the CPU!**



The Flyer Family also consists of some very powerful, upgradeable and economical desktop systems. The PowerFlex FLYER and Flyer 32DT... The Flyer Family also offers two complete multimedia workstations. The Flyer MPC and the FLYER 32 MPC... Prices start at just \$2,795



Model	PowerFlex FLYER	Flyer 32 DT	Flyer 32 LCT
CPU Options upgrades to	i386SX/25 i486SX/20	i486SX/20 i486SX/25 i486DX/33 i486DX2/50	i486SX/25 i486DX/33 i486DX2/50
Memory Arch.	16-bit	32-bit	32-bit
Standard RAM	1-MB	4-MB	4- or 8-MB
Maximum RAM	16-MB	36-MB	64-MB
Memory Cache	8-KB int. (i486SX only)	8-KB int.	8-KB int.
Optional Cache		256-KB (Std on DX2/50 Models)	10 ISA
Expansion Slots	3 ISA	3 ISA	0/120/340/
Standard HDrive	60/80-MB	0/80/120/	200-MB
Drive Bays	3	3	12
Starting Price	\$999	\$1,495	\$2,295
New 50-MHz i486DX2		\$2,495	\$3,595

For the start of a great, more open, relationship. Visit your favorite ALR reseller, or call:

1-800-444-4ALR

ALR
Advanced Logic Research, Inc.

9401 Jeronimo
Irvine, CA 92718
TEL: (714) 581-6770
FAX: (714) 581-9240

Available at these nationwide locations:

ComputerLand

Connecting Point

ENTRE
COMPUTER CENTERS

IBM BUSINESSLAND

ALR Power Partner
Resellers

Prices and configurations subject to change without notice. Pricing based on U.S. dollars. Systems shown with optional monitors. Some products shown with optional equipment. Contact ALR or your local ALR reseller for complete pricing. IPS (IBM) Model 95 (25-MHz i486DX) rated at 8.5 MIPS. Source: Power Meter/IM V 1.7 The Data Base Group, Inc. Upland, CA. ALR is a registered trademark of Advanced Logic Research, Inc. Intel Inside Logo is a trademark of Intel Corporation. All other names and product names are trademarks or registered trademarks of their respective owners. © 1992 Advanced Logic Research, Inc.

Top of the News

detailed profiles of millions of their customers—everything from salaries and home values to the ages and weights of family members. The result: A 1991 survey by Louis Harris & Associates Inc. found 56% of Americans think it's important to be able to "opt out" of mailing lists. And since mid-1990, some 2 million have contacted the Direct Marketing Assn. (DMA) in New York to do just that. By contrast, from 1971 to 1990, just 160,000 did so.

The backlash is causing anxiety among retailers, charities, and others who take in \$200 billion annually via direct-mail campaigns. Marketers are worried that some consumers are going overboard, calling for stiff laws requiring approval from everyone on a mailing list. Such "opt in" bills are pending in California and in Europe. Says a DMA spokesman: "That would destroy direct marketing as we know it."

NEW WEAPONS. While some companies are scrambling to adjust, others are using privacy as a weapon. American Telephone & Telegraph Co. is airing TV ads attacking MCI Communications Corp.'s Friends & Family program, which offers 20% off frequent calls. In the ads, a woman is outraged when a telemarketer asks for the phone numbers of people close to her. "Many consumers feel that is an invasion," says an AT&T spokeswoman. MCI is trying to allay fears. Last fall, it tightened access to the Friends & Family data base. Before the added security measures, callers could dial an 800 number and just punch in a zip code to get anyone's calling list and the relationships of those on it.

Privacy issues promise to get hotter in the future with such items as scanners that track your car as it moves through toll booths. "New technologies require new policies," says Columbia's Westin. To stay ahead of the backlash, companies are finding they have to move fast.

By Evan I. Schwartz in New York

PROTECTING PRIVACY

EQUIFAX Has quit selling credit and lifestyle information to most direct marketers

FIDELITY Has installed passwords for clients to access their mutual funds data

R.R. DONNELLEY/METROMAIL Has tightened its policy governing who can buy the mortgage and birth announcement data it collects and sells

MCI Has limited public access to its Friends & Family data base

NORTHERN TELECOM AND CENTEL Ended secret electronic monitoring of workers

DATA BW

ENTERTAINMENT



WICHITA SING-ALONG: CUSTOMERS TAKE THE MIKE AT A PEPSI PROMOTION AT ALBERTSON'S

WHAT'S THAT NOISE IN AISLE 5?

Karaoke may be coming soon to a supermarket or mall near you

Croak-ey. Carry-o-key. Kah-rah-okay. *Karaoke*. It doesn't matter how you pronounce it (kah-rah-OH-kay is right), as long as you get with it. Until now, the Japanese nightclub pastime of singing along with recorded accompaniment has been an oddity in the U.S., confined to Asian hangouts and the occasional establishment trying to boost its bar take. But that's about to change, as karaoke moves into the mainstream of American pop culture.

Karaoke is a natural for celebrity-obsessed Americans, since it gives everyone the chance to be a star—temporarily. After all, even the tone-deaf can sing to background music while the lyrics scroll along a screen at the proper tempo. And the results are far more impressive than singing in the shower, since the canned music and live performance are electronically mixed, then amplified. **UH-HUH.** But karaoke's real U.S. home isn't nightclubs, where Yankee beer-guzzlers aren't as enthusiastic as Japanese sake-sippers. Instead, the U.S. market for karaoke turns out to be parties and commercial events: It's replacing disk jockeys at weddings and bar mitzvahs, clowns at kids' birthday parties, and comedians at sales meetings. Corporate sponsors are on board, too, pouring advertising bucks into karaoke promotions at such venues as car dealerships, shopping malls, and grocery stores.

Grocery stores? "I never thought we'd

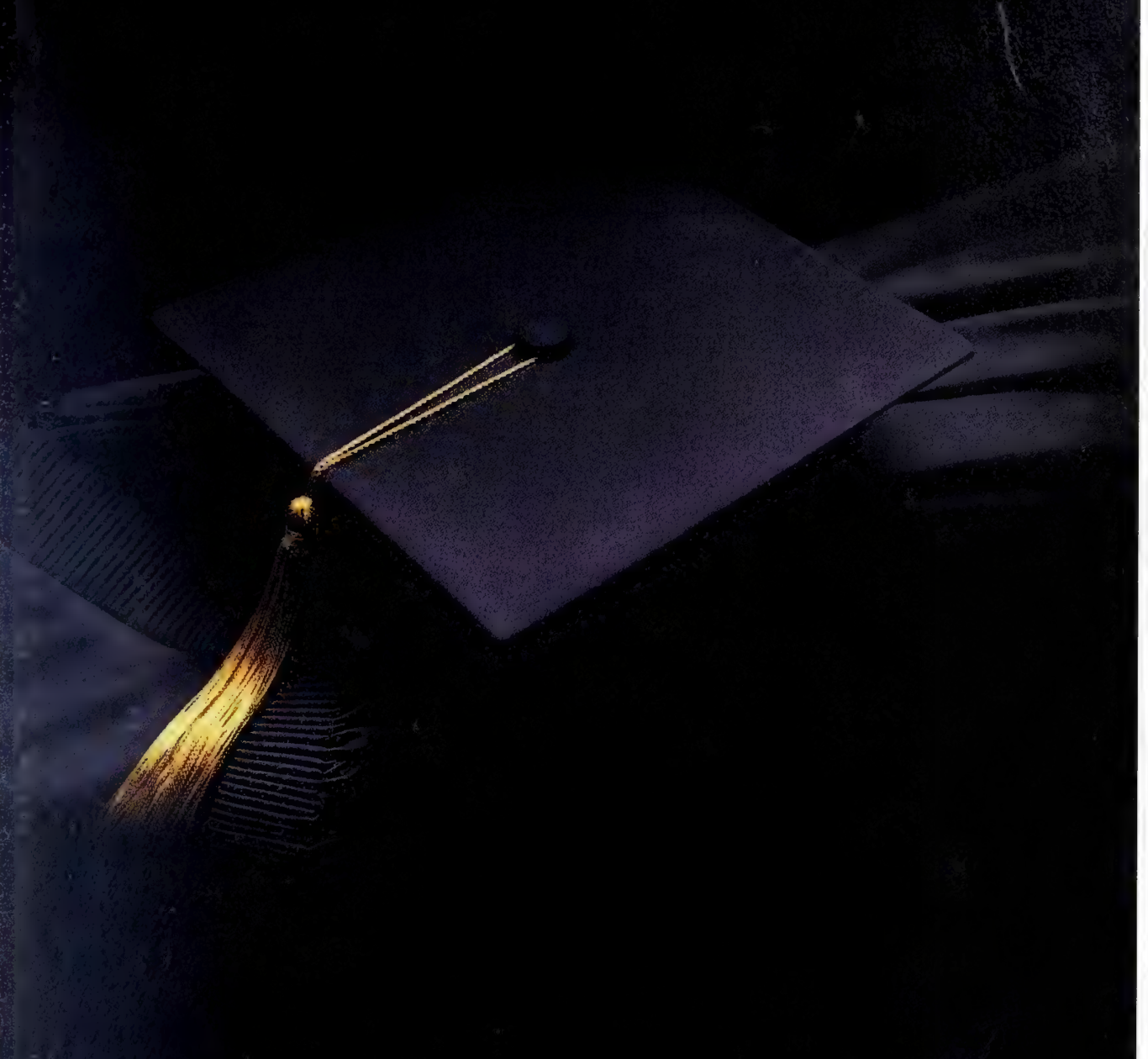
find 50 people a night who wanted sing in a grocery store," says Joe Led manager of an Albertson's supermarket in Wichita. Instead, customers lined for his week-long country-and-western karaoke promotion in May. Those who belted out such songs as *All My Love* and *Live In Texas* won cash prizes and tickets to a Garth Brooks concert. Better yet: Receipts rose 20% for the week.

The largest karaoke promotion so far has been PepsiCo Inc.'s "Uh-Huh" for Diet Pepsi. At more than 3,000 events in March and April, amateurs had the chance to sing a song—and a Pepsi jingle—backed by the Uh-Huh girls (live) and Ray Charles (a cardboard cutout), while some 20 million watched. **COMIC RELIEF.** But it is Japan's Pioneer Electronic Corp. that gets the credit for bringing karaoke to America. Pioneer first set up a subsidiary to sell karaoke in the U.S. in 1988. This year sales will approach \$100 million. No one in the industry's nascent trade association guesses that U.S. sales of equipment and music could top \$600 million in 1992.

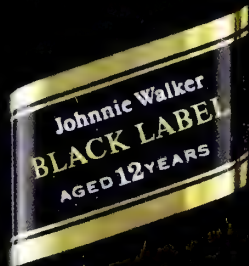
That's welcome relief for the stagnant consumer-electronics industry, which showcased karaoke at its semiannual trade show in May. Its centerpiece was a 50,000-square-foot Cafe Karaoke restaurant, which hosted the biggest karaoke event yet: nonstop contests on five stages simultaneously. Coming next is *Karaoke Showcase*, a weekly TV talent contest that will appear on 120 stations starting June 6.

Don't like to sing? Then try this: In shopping malls across the U.S., you can soon catch the Stand Up To Go tour, a promotion that lets comic wannabes step up to the mike and read jokes as they scroll across the screen. That should be good for plenty of laughs—no matter how dismal the delivery.

By Larry Armstrong in Los Angeles



Thank Dad for putting you in the Black.



Ultimately, there's Black.™

© 1992 SCHIEFFELIN & SOMERSET CO., NY, NY. JOHNNIE WALKER® BLACK LABEL® BLENDED SCOTCH WHISKY, 40% Alc/Vol (80°).

EDITED BY HARRIS COLLINGWOOD

DOW JONES? ANY KIN TO JAMES EARL JONES?

From takeovers to scandals, high finance has made big headlines in recent years, but the markets remain a mystery to many Americans. Oppenheimer Management Corp., a leading mutual-fund manager, recently commissioned a survey of 2,021 men and women. The results show that most Americans have lots to learn about investing

Women Men

Percent who didn't know that stocks have historically outperformed other popular investments 69 53

Percent who had no idea of the level of the Dow Jones industrial average 89 69

Percent who don't understand how a mutual fund works 62 50

Percent who would rather discuss family finances with their spouse than go to the dentist 72 74

DATA: THE WIRTHLIN GROUP

IS BUFFETT READY TO HAND OVER THE KEYS?

► Warren Buffett may quit his Wall Street job as early as June 3. That's the date of Salomon's next scheduled board meeting and a good time for Buffett to name the next CEO of Salomon Inc. One possible candidate: John Byrne, CEO of Fund American and former chief of GEICO, a winning Buffett investment.

The CEO's primary task will be keeping an eye on Salomon's two operating units, Salomon Brothers and Phibro Energy. Buffett has already named Deryck Maughan the chairman of investment bank Salomon Brothers.

LONDON'S MOUNTLEIGH IS FALLING DOWN

► The big European takeover machine fashioned by U.S. dealmakers Nelson Peltz and Peter May has faltered.

Mountleigh Group, their British property developer and owner of Spain's second-largest department-store chain, has gone into receivership, staggering under some \$950 million in debt.

Peltz and May gained control of Mountleigh in late 1989, just ahead of the crash in British real estate prices that has imperiled such other developers as Olympia & York. The duo never came close to replicating in Europe the wheeling and dealing that made them a fortune in the U.S. Instead, the roughly \$90 million in shares they hold are nearly worthless. They are in illustrious company: A year ago, Peltz and May lured equity investments from Chicago's Pritzker family and a trust controlled by oil scion Gordon Getty.

A FORK IN THE ROAD FOR CONTROL DATA

► Control Data, the last of the independent, old-line mainframe computer makers, plans to split into two companies. Pending approval from its banks, the struggling company will spin off its computer business as Control Data Systems, while the remaining information-services operation will be named Ceridian.

Control Data CEO Lawrence Perlman will be in charge of Ceridian, while James Ousley will head the computer arm.

WALTER MITTY MEETS MICHAEL EISNER

The protagonist of Robert Altman's new film, *The Player*, is a Hollywood studio exec whose job is to decide which scripts can be turned into hit movies. He seems to have no qualifications—barring an utter lack of scruples—for picking winners.

Maybe that's why Donaldson, Lufkin & Jenrette's Summer Movie Sweepstakes is so popular: Most people think they can gauge popular taste. The contest, run by DLJ leisure analyst Mark Manson, lets the brokerage firm's customers play mogul, predicting which seven summer films will do best at box office. Top prize is a glamorous night on the town, complete with film screening.

Manson's own forecast for top-grossing summer movie: *thel Weapon 3*. He is hoping that everyone chooses *Batman Returns*, though. "The consensus is always wrong," he says. Spoken like a true stock-picker.

Workstation maker Silicon Graphics plans to buy 10% of the new computer company, and Japan's NEC may purchase a 5% share.

LOUD CHEERS FROM THE MAIL-ORDER BIZ

► For another day at least, the mail-order industry can breathe easy. On May 26, the U.S. Supreme Court upheld its 25-year-old ruling that a state cannot tax sales of companies that mail products from outside the state. North Dakota had challenged a 1967 high court ruling that said states may tax only out-of-

state mail-order firms to maintain a physical presence in the state.

The court didn't expressly prohibit states from taxing mail-order houses. It said Congress could allow a practice if the taxes didn't interfere with interstate commerce. But although about \$1 billion in state tax revenue are at stake, Congress is likely to act on the issue soon.

AN ANTICLIMAX AT CENTEL

► It looks as if Wall Street overestimated the desirability of this year's prime merger candidate. When Centel put itself on the block on Jan. 8, its stock soared on the expectation that the big regional Bells would bid up the Chicago-based phone company's local telephone operations and cellular properties. But on May 27, Centel announced a stock-swap merger with Sprint that values Centel at just \$33.50 a share, based on Sprint's closing price the day. Centel had closed the same day at 42½.

Centel holders are sure to protest. But Centel Chairman John Frazee says he expects no problem winning shareholder approval.





You don't want to get bogged down in revolving debt on bankcards.
Especially since some bankcards charge 19% interest. That's outrageous.
But you know how to get out of that trap. And stay out.

THE CARD.
THE AMERICAN EXPRESS® CARD.

Call 1-800-THE CARD, to apply.

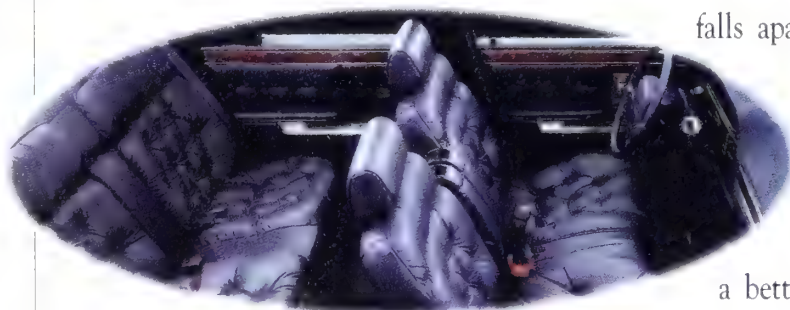


If it had less legroom, a lesser warranty, and cost thousands more, it could be a Cadillac.

Logic would seem to dictate that when you pay thousands of dollars more for a car, you should get a lot more car. Apparently, in the case of the Cadillac Sedan DeVille versus the Chrysler Fifth Avenue, logic does not apply. Both cars provide ample room for six, air-conditioning, automatic transmission, automatic load leveling, stereo sound system, fully reclining seats, all as standard equipment. Both offer safety and performance. A driver's air bag is standard on the Chrysler Fifth Avenue, as is a powerful fuel-injected, 3.3-liter V-6. Anti-lock brakes are also available. Here, however, is where logic totally



falls apart. The restyled Chrysler Fifth Avenue costs thousands less, yet it has more legroom than the largest Cadillac.* And it offers



a better warranty: bumper-to-bumper

protection for 5 years or 50,000 miles.[†] And now the added incentive of \$1,500 cash back. Defy logic. Pay less, get more. Chrysler Fifth Avenue. For information, call 1-800-4A-CHRYSLER.

ADVANTAGE: CHRYSLER 
A DIVISION OF CHRYSLER CORPORATION

THE HEAD-SPINNING SPLIT OVER BANKING

Bankers are having a hard time figuring out what Washington wants from them these days. The Bush Administration, fretting that tight-fisted bankers are hobbling economic recovery, wants more aggressive lending. Congress, worried that another savings and loan mess is about to land on it, has ordered tighter regulation to cut risk. The result: "There's absolute schizophrenia in Washington," complains Edward L. Yingling, chief lobbyist for the American Bankers Assn. "The banking industry feels like the wishbone at Thanksgiving." And bankers should not expect relief any time soon.

The pulling and hauling is an inevitable consequence of last year's Federal Deposit Insurance Corp. Improvement Act (FDICIA). The law began life as an Administration effort to deregulate healthy banks while clamping down on weaker ones. By the time it emerged from an S&L-panicked Congress, the FDICIA imposed new restrictions on all banks without offering them any new business opportunities.

REGULATORY HELL. The new law is starting to squeeze the industry: On May 20, the Federal Deposit Insurance Corp. put limits on the use of "brokered deposits"—large certificates of deposit sold to savers through a third party, such as a stockbroker. Banks whose demand for loans will force them to offer higher rates to attract deposits will face an unpleasant choice. They'll either have to keep more capital than required by normal regulatory standards or get an FDIC waiver.

These rules are the first step in tying banks' activities to a multitiered set of capital requirements that Kenneth A. Genther, executive vice-president of the Independent Bankers Association of America, describes as "the five regulatory circles of hell." Even such solid institutions as First Union Corp. in Charlotte, N.C., and San Francisco-based Wells Fargo & Co. may be forced to alter their capital structures,

transferring equity from the parent holding company to individual banks as new rules kick in over the next few weeks.

There's more to come. Rules required by the FDICIA will boost banks' paperwork and limit everything from who can sit on their boards to how much their officers can earn. To carry out the law, agencies must write some six dozen new regulations—including one setting up a study on how to eliminate unnecessary rules. "If you just look at FDICIA, it's conflicting in itself," grumbles FDIC Vice-Chairman Andrew C. Hove Jr.

Bush aides, by contrast, have been pounding on banks for months to pump money out to borrowers, even if it means taking more risk. Now, Administration officials are pushing the regulators to give financial institutions powers that Congress refused to grant. Timothy Ryan Jr., director of the Office of Thrift Supervision, has boldly issued regulations allowing thrifts to branch nationwide. The Federal Reserve is studying ways to expand banks' ability to underwrite securities. And while Congress rejected an Administration plan to consolidate banking regulation in one superagency, the White House has ordered all four federal regulators to use common rules and examination standards.

Not content to stop there, the Administration may try a frontal assault on the new law. The Treasury Dept. is quietly looking for congressional allies to sponsor repeal of some of the more extreme micromanagement imposed by the FDICIA.

But a gun-shy Congress isn't about to take banks off the hook. Money is still pouring down the S&L rathole. And lawmakers know that some big banks remain in jeopardy because they dumped billions into speculative real estate deals. Memories of bankers' recent stupidity have lawmakers in no mood to loosen the new regulatory shackles.

By Mike McNamara and Tim Swari



RYAN WANTS THRIFTS TO BRANCH OUT

CAPITAL WRAPUP

HOUSING

No activity in the U.S. is more heavily subsidized than home ownership, which gets tax breaks worth at least \$70 billion a year. But as politicians search for ways to reduce the deficit, a new poll commissioned by the Federal National Mortgage Assn. demonstrates the danger of tampering with these tax goodies. The survey of 521 households, conducted by pollsters Peter D. Hart and Robert M. Keeter, found that 71% of Americans would give up two weeks of vacation a year to be able to own a house. Nearly 60% would give up a decade of early retirement as the price of home

ownership, and 57% think taking a second job was a worthwhile sacrifice to own their residence. The main reasons folks want to own homes: freedom from landlords, a sense of belonging to the community, and investment potential. More than half cited tax breaks as a "very convincing reason" to own.

LABOR

Congress may soon have to intervene again to stop a nationwide railroad strike. After months of mediation, two rail unions will be legally free to walk off the job on June 24. Last year, lawmakers angered unions by appointing a board to dictate a settlement after a one-day strike.

CONGRESS

House Democratic leaders may soon face a direct challenge to their increasingly shaky power. Minority Whip Newt Gingrich (R-Ga.) has launched a campaign to reform House rules. His plan would slash committee staffs, terminate perks, lessen leaders' control over the flow of legislation, and name an independent inspector general to police members' activities. The Republicans lack the votes to force their agenda. But the GOP could attract support from the disaffected young Democrats who have already forced their leadership to allow a vote on a balanced-budget constitutional amendment.

PREVENTING CHERNOBYL II

Can the West move fast enough to stop another nuclear catastrophe at one of the East's 56 plants?

It's a hot spring afternoon in the Bulgarian town of Kozloduy, an odd mix of peasant huts and concrete high rises scattered alongside the Donau River. On a flat hilltop just outside of town, a tall, barbed-wire fence rings a Soviet-designed nuclear power plant. Inside a grubby reactor control room, chief reactor engineer Vasil Manolov, 40, is angrily kicking a yellowed box full of half-exposed electronic parts. "Look at this garbage," he says as he pokes at a twisted web of wires that process data from a reactor just 100 feet away. "It's a miracle this stuff still works."

Miracle, indeed. The 1986 Chernobyl nuclear disaster, which has killed as many as 8,000 people and contaminated one-tenth of Ukraine, introduced the West to the lethal safety flaws of nuclear plants behind the Iron Curtain. Now, as the ex-Soviet empire's economic and political dislocations mount, chances are growing that a harrowing sequel to Chernobyl may take place at one of the 56 operating reactors that pockmark the former Soviet bloc (map, page 45). There already have been four major incidents at Soviet-designed reactors since Chernobyl. The most recent was in late March, when sirens blared an alert at the Sosnovy Bor plant near St. Petersburg, an area of 5 million people.

HOSTILE TAKEOVER. The West, finally, seems to be waking up to this civilian equivalent of a nuclear-weapons threat—or worse. Unlike nuclear warheads, where the danger could be calculated, reactors present a nightmare of uncertain choices. Some, like the Chernobyl-style reactors at Sosnovy Bor, are highly unstable, while others are prone to leaks and fires. All are governed by a hodgepodge of standards designed to ensure they keep producing energy, not address health or environmental safety.



REPAIRING COOLING SYSTEMS AT KOZLODUY, BULGARIA: "WE'RE DRIVING THIS REACTOR BLINDLY"

In meetings held in European capitals in past weeks, officials from Europe, the U.S., and Japan have hammered out a three-stage, \$10 billion plan to eventually shut down the worst reactors. Others will be upgraded, and major parts of the East's energy sector restructured.

Western leaders expect to unveil the plan as the centerpiece of the July summit of the seven largest industrialized nations in Munich. If carried through, it could mark the biggest technology transfer contemplated since Henry Ford built tractors for Joseph Stalin's Russia.

years ago. Because more funds would almost certainly be required later, they could eventually rival the Marshall Plan that revved around Western Europe following World War II.

The plan being devised by the Group of Seven nations could spark a gold rush among hungry Western nuclear power engineering companies. From Germany to France to the U.S., beleaguered energy-engineering companies such as Siemens' KWU unit, Siemens, and Westinghouse Electric have good reason to help ward off a nuclear disaster that could rattle out flickering Western public tolerance for nuclear power. At the same time, they could boost their bottom lines with awards of contracts.

The stakes go way beyond that, however. Without a secure energy sector, the former Communist

world's ability to adopt free-market economics and democratic reforms will be compromised. "Unless you get the energy sector in good working order, you forget democracy and the rest," says Michael Stürmer, director of the research Institute for International Affairs in Ebenhausen, Germany.

MOVING BLIND. It won't be easy. The people the West's proposals are aimed at helping already are arguing over how far and how fast they should go. To Russia's proud nuclear-energy industry, it all spells nothing less than a hostile takeover of hundreds of companies that now employ some 800,000 workers and have deep ties to the nation's military-industrial complex. Russian experts did not attend the G-7 meetings, so now they are putting together a response that Russian President Boris Yeltsin will present to Western leaders in Munich. With the future of the Russian nuclear power industry at risk, the path to fundamental changes in East-West nuclear-energy policy could be just as difficult as arms-control talks.

Even as Western officials develop their plans, for example, Moscow's Ministry of Atomic Energy is pushing a program to restart construction of a half-dozen reactors in Russia, including a Chernobyl-type model in Kursk. No shutdown of Russian reactors would be contemplated "unless we have assured a supply of replacement power,

THE WORST OFFENDERS

Western governments have identified nine nuclear power plants in the former Soviet Union and Eastern Europe, with a total of 24 reactors, that must be permanently closed



er," says Victor Sidorenko, deputy minister at the atomic energy agency.

Others in the East, however, are in a hurry. Managers at Bulgaria's Kozloduy plant, for example, are anxious to stabilize their four first-generation VVER models, which would eventually be shut down under the Western plan. They insist aid is urgently needed. "By Western standards, we're driving this reactor blindly," says reactor chief Manolov. "We have no computers telling us what's going on inside it or controlling the process." Nor are there any operating manuals at two newer reactors: Russian technicians, angry at the Bulgarians' inability to pay their bills, simply walked off with the manuals last year.

new procedures, and better management will be in. The West will train, advise, and help make safety assessments working with regulators in Russia, Bulgaria, Czechoslovakia, Hungary, Lithuania, and Ukraine. Funding for the project will include \$24 million a year from the European Community.

CRASH TRAINING. At the same time, plant engineers, reactor operators, and safety personnel would get crash training at nuclear plants in the West or at the International Science & Technology Center in Moscow. Key organizations such as the World Bank and the International Energy Agency in Paris would meanwhile decide which reactors under construction should be finished. By the end of next year, the International Atomic Energy Agency in Vienna has to negotiate a new global nuclear convention that will set mandatory safety rules for reactors all over the world—beginning with the Soviet-made ones as they are upgraded.

Upgrading these 32 nuclear reactors in Russia, Ukraine, Bulgaria, Czechoslovakia, and Hungary would certainly be the most lucrative phase for Western companies, which would compete for at least \$2 billion to \$3 billion in orders over five years. That's not counting such projects as the construction, to the tune of at least \$2 billion, of an enormous new sarcophagus to re-bury the destroyed Chernobyl



FIVE REACTORS PRODUCE 40% OF BULGARIA'S ENERGY

reactor or the decommissioning of three other reactors there. Altogether, this phase could cost up to \$9 billion.

To help pay for upgrading operating plants, the East would have to borrow heavily. It could get cheaper loans from the World Bank and EBRD, as well as bank credits guaranteed by the international agencies, but ultimately it would have to come up with about \$500 million. Some of that could come from cash flow generated by their utilities and from their own governments.

The West's plan also doesn't cover the longer-term task of mothballing and dismantling the 24 worst reactors, as called for by phase one. This might prompt East Europeans and ex-Soviets one day to balk and try to keep those reactors running.

But if the plan is accepted by West and East alike, the race for orders would heat up by next year between the main Western players—Siemens, Framatome, Westinghouse, as well as Italy's Ansaldo, Sweden's ABB Asea Brown Boveri, and the U.S.'s Bechtel. Adolf Hüttel, chief of Siemens' energy engineering KWU unit, expects his company will get about \$60 million a year in contracts if the plan goes through, but more from helping build replacement power plants.

'UNACCEPTABLE.' Not everyone is coming. Intervention into the East's energy industry may hang a heavy—and not universally desired—liability on Western governments and companies. They would become responsible for West-supplied nuclear equipment that would be relied on to generate a large share of the region's power. Not surprisingly, some major Western companies prefer to stay away. "We can't risk our name in Russia," says Steve Barber, an executive of General Electric Co.'s Nuclear Energy Division. "How can we make sure they will operate our equipment properly?"

There are other imponderables. Russia's atomic energy ministry, which has largely inherited the old Soviet mindset, is opposed to the idea of a speedy shutdown of Chernobyl-type reactors. "The plans to close down reactors without introducing new capacities are unacceptable," says Sergei Yermakov, the ministry's chief spokesman.

With oil production collapsing and brownouts already routine in some areas, Russia needs all the nuclear power it can get. Chernobyl-type reactors generate about one-half of it. Together with old, first-generation VVER reactors, they supply 63% of power to Russia's heavily industrialized regions. Little wonder, Sidorenko insists his ministry will make sure all nuclear power stations "keep working until their design life runs out." This means well into the next century.

Yeltsin is likely to accept the G-7 plan in Munich, but before it can be fully implemented, the West would almost certainly have to satisfy at least some of the concerns expressed by the old military-industrial complex. Aside from nit-gritty details of which reactors are

reactors at the Ignalina Nuclear Power Station, and it gets most of its export revenues from selling power to Belarus and Latvia. The republic's safety regulator, Gennady Lipunov, is cynical about the situation. "A good RBMK is a dead RBMK," he told a recent meeting in Paris. "But what can we replace it with?"

Ukraine now gets up to 40% of its power from nuke plants and exports a small amount to Bulgaria. But now that the Ukraine government has decided to mothball all reactors at Chernobyl, it will be hard-pressed both for energy and hard currency. Similarly, with Russia export prices for gas and oil soaring, nuclear energy looks more attractive. Bulgaria, which depends on its five reactors to produce about 40% of its energy

Almost half of Hungary's electricity is nuclear-generated.

BASIC FLAWS. Czechoslovakia is planning to get fully one-half its energy from nuclear plants by the year 2000. Its eight operating reactors and six that are under construction are all of the Soviet design. Two of them, in Bohunice, not far from the Hungarian border, are of the first-generation VVER model that the West wants to shut down. Although Siemens KWU division is helping with other Czech plants, Western companies so far have shied away from putting



YEARS AFTER THE DISASTER, RADIATION LEVELS REMAIN HIGH NEAR CHERNOBYL

improved and which ones shut down, the Russians almost certainly will insist that the West cannot dictate all the conditions. With so many careers on the line, the Russian apparatchiks are determined not to completely lose control.

The urgent need is to break through all the logjams before former Soviet allies, acting in a vacuum, deepen their dependence on unsafe energy or take other desperate, go-it-alone steps. Ukraine, Lithuania, Bulgaria, and Czechoslovakia, for example, all find themselves between a rock and a hard place. Despite their independence, Moscow is still firmly holding them in its economic orbit as its engineers continue to keep key technical drawings and reactor knowhow to themselves. While these countries would be happy to get rid of unsafe reactors, they depend far too much on the energy they generate.

Lithuania draws over 70% of its electricity from the world's largest RBMK

reactors, which are dangerous unsafe.

That's the case for most of the reactors slated for shutdown. Parts and upgraded training procedures will not be enough to make up for basic design flaws. The older VVERs, for example, lack containment domes and adequate control instruments. The control rooms themselves are seriously flawed: The control room at one of Kozloduy's older reactors has large windows that are half open, looking out to overgrown grass lawns. That is a flagrant breach of the safety rules that are accepted in the West. There, control rooms are sealed off from the rest of the plant and independently air-conditioned. A radioactive leak anywhere in the Kozloduy plant would immediately affect reactor operators, because the window's slightly warped wooden frame provides poor protection. "Such a setup is extraordinary,"

Canon introduces the CJ10 color copier, printer, scanner.



Now the power of color is yours.

With the CJ10 on your desk top, you can make remarkably high-quality full-color copies and overhead transparencies.

In fact, CJ10 copies have virtually the same picture-like clarity and crisp, black text as copies made by Canon's renowned Color Laser Copiers. And, with a simple option, the CJ10 connects to your computer so you can scan and print in high-quality color too.

The complete CJ10 desktop full-color system lets you create such effective color documents that it could be the most powerful business tool ever put on a desk top.

It's easy to use, easy to maintain, and priced so that it's easy to afford. With a CJ10, the power to improve your image is finally within your reach.

For more information, simply call 1-800-OK-CANON.

CJ10
COLOR BUBBLE-JET COPIER

Canon

says Friedrich Niehaus, who is head of the safety assessment section at the IAEA.

Niehaus was among the agency's Western experts who rated the first-generation Soviet-designed VVERs as a high safety risk and called on the Bulgarian government to shut down the four older Kozloduy reactors. Fixing such faults, says a report by Siemens, would be a \$25 million job for the Kozloduy management—an impossible sum for a plant where a top-earning engineer takes home about \$500 a month. Lax safety doesn't seem to bother Manolov: He walks up to the window and opens it a crack more. "Let's get some fresh air," he says with a smile.

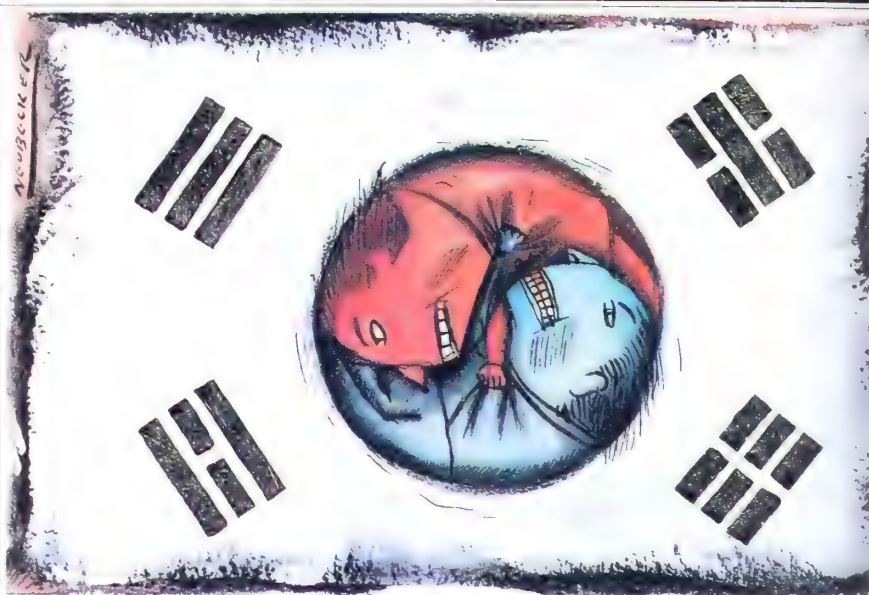
TOP PRIORITY. The essential problem is translating the West's rescue vision into reality before governments in the East backslide. Some, like Bulgaria, have already decided to restart the first-generation Kozloduy reactors that they earlier agreed to shut down. To be sure, such plans are partly an attempt to bargain for more and faster aid. But they're also born of uncertainty and frustration with the West's promises. Sighs Jordan Jordanov, safety manager at the Kozloduy plant: "I will frame and hang up on my office wall the first dollar that comes our way."

Such skepticism may have been justified in the past. But just as the former Soviet empire is undergoing a transformation, so too are Western institutions bowing to pressures to help the Eastern nations. The West already includes the former Communists in the International Monetary Fund and other key institutions. In effect, Europe, the U.S., and Japan are developing a new East-West program for rebuilding the former Communist world.

On this ambitious agenda, the issue of fixing the East's shaky nuclear industry is a clear priority. For the West, the fuzziness of ruble-stabilization funds and Russian defense conversion still seem politically risky and even a waste of money. But the heavy scare factor along with the West's clear self-interest in preventing another nuclear disaster should translate to much broader support for the reactor challenge. Says one senior State Dept. official: "Given all the horrors that lie ahead in terms of the transformation of these states, this is a good way to get engaged. Who could object to preventing more Chernobyls?" That's why dollars may be pinned up in reactor control rooms sooner than many Easterners dream.

By Igor Reichlin in Kozloduy and Bill Juretski in Paris, with Deborah Stead in Moscow, Gail Schares in Bonn, and bureau

KOREA



PARALYSIS IN SOUTH KOREA

Its elite corporate families are feuding, and the economy is hurting

Ever since rising from the ashes of the Korean War, South Korea's economy has been dominated by a tightly knit group of military-backed technocrats and top politicians who have showered favors on powerful business families. The heads of these business groups, or *chaebol*, in turn contributed campaign funds to the politicians. It was this Korea Inc. that challenged Japan by building up huge shipbuilding, automotive, and electronics industries. Despite periodic feuds, the elite Korean families were intermarried and shared a common purpose of nation-building. They believed in the marital concept of *il sim dong chae*, or one mind, one body.

But the days of harmony may be over. South Korea is facing its most difficult transition since 1987, when former President Chun Doo Hwan, in the face of massive street protests, engineered the election of another former general, Roh Tae Woo. After five years in office, Roh must step down in February. His ruling Democratic Liberal Party on May 19 decided to run a former dissident, Kim Young-Sam, as Roh's handpicked candidate. But challenging this plan is the founder of the \$50 billion Hyundai business group, Chung Ju-Yung, who on May 15 made it official: He is running for president in the December elections.

That sets the stage for a grueling power struggle at the top of the Korean establishment. It also is triggering new conflicts among the *chaebol* themselves. Korea could pull through the turmoil and become more democratic and, ultimately, more competitive. But it's also possible the power struggle will rock the stability of Korea's elites, threatening the country's increasingly fragile economic gains. A third candidate, opposition leader Kim Dae-Jung, could siphon off votes from Kim Young-Sam and give Chung an outside chance to seize the presidency. "For the first time in Korean history, the business community is vying for political power," says David I. Steberg, professor of Korean studies at Georgetown University.

GRIDLOCK. While this plays out, decision-making in Seoul has ground to a standstill, even as the economy stumbles. While Korea could rack up growth of 10% this year, that's in the face of high inflation, a worsening trade deficit, high interest rates, rising bankruptcies, and declining investment. The *chaebol* are also holding back on key investments and are losing ground to the Japanese. "The government and the *chaebol* should be working together to improve Korea's competitiveness, but sadly, no one seems to be interested," says Sun Han-Bon.

director of Hanshin Securities Co. The gridlock is affecting foreign perceptions of Korea. One striking vote of confidence: Korean company stocks are sold like hotcakes to international investors. But despite the formal opening of Korea's stock market on Jan. 3, foreigners have bought a minuscule \$800 million worth of shares. "We've a lot of inquiries on Korea, but we're afraid to recommend anything," says one U.S. broker in Seoul. Some U.S. executives are nervous about their joint ventures with the *chaebol*, particularly Hyundai.

At the core of the battle is a bitter, personal feud between Chung Ju-Yung and President Roh. Chung, 77, blames Roh's government for Korea's ailing competitiveness, corruption, and increased cost of doing business. So, the Korean-style *chaebol* Perot formed his own political party, and in March the Unification National Party won 17% of the votes and 10% of the seats in a National Assembly election.

JABBLING. Roh, it seems, will stop at nothing to block Chung. The government arrested his fifth son, Chung Ju-Hun, vice-chairman of Hyundai's shipping unit, in April, on charges of tax evasion. Although he has formally retired from Hyundai, Chung is running it over to a younger son. Chung himself is under investigation for "borrowing" funds from Hyundai. The government has also engineered a financial squeeze on Hyundai, forcing the engineering unit to the brink of bankruptcy. An anti-chaebol law is being drafted.

Roh even summoned Hyundai Chairman Chung Ju-Yung and the heads of Daewoo, Samsung, Lucky-Goldstar, and Sunung groups to the Blue House presidential palace on Jan. 25 and warned them to get out of politics.

The *chaebol* have traditionally cooperated among themselves, in part because sons and daughters of the founding families are intermarried. But they, too, increasingly at odds with one another. Daewoo Chairman Kim Woo-Choong last March called Chung's political ambitions "unfortunate," creating the appearance that Daewoo is pro-government. Samsung and Lucky-Goldstar sought to remain neutral.

As the conflicts are erupting, Samsung has taken aim at Daewoo in a nasty dispute over one of Korea's most sensitive subjects: business ties with Commu-

nist North Korea. Since visiting North Korea in January, Daewoo's Kim has increased his trading activities by buying North Korean cement and zinc and shipping it directly to South Korea, a potentially lucrative privilege denied to other companies.

Critics are alleging that Daewoo is taking unfair advantage of its connections with Roh's government to secure this access: Kim's daughter's father-in-law, Kim Jun-Sung, is a former Deputy Prime Minister and thus well-connected. Samsung was so irked that it took an unprecedented step: It went to the press,

who argues that government-business ties are the source of political corruption, though Chung admitted he provided Roh with huge contributions while running Hyundai.

Chung says he will press for profound changes in how the *chaebol* operate. The vast conglomerates have been run by single founders and their families through a maze of cross-investments. Now, Chung argues that different operating units should function more independently from the founding families—and with their financial ties diluted, they'll become more competitive. "Economically, the *chaebol* have outlived the need for them," Chung says.

Roh wants to go further, perhaps even breaking up the *chaebol* and ridding them of family influence. Finance Minister Rhee Young-Man is proposing to legally ban the owners from managing the *chaebol*. Says Rhee: "The owners become ineffective when the *chaebol* become as big as they are today."

Before this battle can be resolved, Korea faces months of paralysis. Korea's big companies are scaling back their investments in new plants and equipment because of the politically inspired credit crunch. For Samsung, a lack of financing could delay in building a new wafer-fabrication plant for its 16-megabit dynamic random-access memory chips, putting the company a step behind Japanese competitors.

PUNISHMENT. A lack of funds could postpone Hyundai Motor's planned introduction of successors to its five-year-old Sonata and Grandeur models. Goldstar, too, is running into financial limits. "The government wants to punish the owners," says a senior Goldstar official, "but what

they are doing is punishing the companies—all in the name of reducing the *chaebol*'s power."

At stake is the future of Korean capitalism. The betting is that the founding families' roles in the big *chaebol* will fade and more professional managers will be brought in to operate smaller, more specialized units. This could transform them into organizations closer in substance and style to Japan's *keiretsu*. If the Koreans can make that leap, loosening the ties that bind Korea Inc. may be a long-term winner, no matter what pain it causes today.

By Luzma Nakamura in Seoul

KOREA INC.'S INTRICATE WEB

The country's top nine business groups are linked by family marriages to two Presidents, two Prime Ministers, top government ministers, as well as influential members of Parliament

Linked by marriage to:

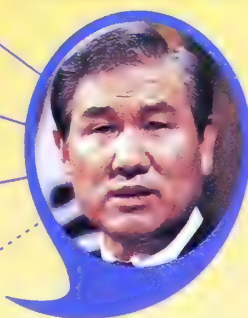
CHOI JONG-HYUN, chairman of the Sunkyoung Group

SHIN DONG-KYUN, chairman of the Dongbang Yuryang Group

KIM BOK-DONG, former general, member of National Assembly

KANG SUNG-JIN, chairman of Korea Securities Dealers Assn.

President Roh Tae Woo



Linked by marriage to:

KIM DONG-JO, former Foreign Minister

NO SHIN-YOUNG, former Prime Minister

RYU CHAN-WOO, chairman of the Poongsan Group

The family of late President **PARK CHUNG-HEE**



Chung Ju-Yung, founder of the Hyundai Group

DATA BW

complaining about Daewoo's ability to "monopolize North-South Korean trade."

In a separate dispute, Goldstar for the first time brought a patent-infringement suit against a fellow Korean company, Daewoo. Sogang University Professor Kim Kwang-Doo says he expects more confrontations to break out: "This is only the beginning."

With a personal net worth of \$4 billion, Chung clearly has benefited from good relations with the government. Even so, he now seems to be enjoying the prospect of dismantling some of the cozy links that make up Korea Inc. "That is good for Korea," says Chung,



Unflagging success in the World Engineering market.

Who has the scale to show the flag on the international engineering scene?

The answer is Trafalgar House, through John Brown and Davy.

This is one of the world's leading engineering and construction businesses, with more

than 50 offices worldwide.

With 26,000 staff who design and construct advanced plants and facilities for the process, power, oil and gas, and metals industries.

With a range of proprietary and licensed technology that is unrivalled.

We are proud that it flies the colours of Trafalgar House.

A world-scale business serving world-scale industries and clients.

JOHN BROWN

Trafalgar House Public Limited Company, 1 Berkeley Street, London W1A 1BY.



TRAFALGAR HOUSE

A World Force in Engineering.

HAS SAUDI ARABIA REALLY BECOME AN OPEC HAWK?

If there's one thing that can spook the oil markets, it is Saudi Arabia hinting that it may favor higher prices. That's exactly what happened when the world's leading oil exporter surprisingly seemed to align itself with such price hawks as Algeria and Iran at the May 22 OPEC meeting in Vienna. The Saudis agreed to a plan keeping the cartel's output unchanged at 23 million barrels per day over the summer. Only days before the meeting in Vienna, the Saudis, who are traditional moderates on pricing, had lobbied for a full 1 million barrel-per-day increase in OPEC's output. "They acted very strangely," says Vahan Zanoian, senior director of Petroleum Finance Co., a Washington-based consulting firm.

The reaction in the oil markets to the apparent about-face was swift: speculative trading sent crude oil future prices soaring to a six-month high, and equity markets in New York and Tokyo recoiled.

IN WALLET. But many analysts question whether the kingdom has really changed its stripes on oil prices. In the short term, say Saudi officials in Riyadh, the kingdom has in fact given tacit assent to a modest increase in oil prices already under way thanks to healthier demand in the U.S. There is no doubt raising the OPEC price to \$21 or \$22 by year-end could be a welcome change," says one senior Saudi minister in Riyadh. Currently, the average price of the cartel's crude hovers around \$19.

Further out, though, officials say the Saudi government is wary as ever of attempts to raise oil prices too swiftly. A move that would undercut Riyadh's game plan of maintaining a healthy, long-term market for its huge reserves. According to the government-owned oil company Saudi Aramco, there has been no letup in a \$27 billion program to boost Saudi oil production capacity by around 25%, to more than 10.5 million

barrels per day, by early 1995. "It's completely in their interest to go for volume, and that means low prices," says a top Western diplomat in Riyadh.

One reason the Saudis are unopposed to a small, temporary price hike is that the oil-rich kingdom is simply finding itself short of cash. Although Saudi oil income could amount to almost \$50 billion this year, military purchases and huge increases, estimated at \$2 billion, in already generous domestic subsidies of electricity, water, and gasoline are translating into an expected budget deficit of over \$10 billion for the current

fiscal year. And official cash reserves are down to less than \$7 billion. King Fahd probably devised the new handouts to assuage discontent over the slowness of political change.

TAX BUSTER? Recently, the government has for the first time started asking large foreign contractors in Saudi Arabia, such as ABB Asea Brown Boveri Ltd. and Mitsubishi Corp., to arrange financing on large construction projects. "Anyone who tells you the Saudis do not need money now is lying," says Zanoian.

Also, the Saudis are angry at the European Community's decision last month to support an energy tax de-

signed to limit carbon dioxide emissions. While the proposed "carbon tax" is widely seen as having little chance of being approved in the face of widespread opposition from European industry, King Fahd wants to make sure his vehement opposition to measures that would limit oil use is felt. The Saudis do not want the upcoming environmental summit at Rio de Janeiro to pass any green taxes at their expense. After all, they know full well that only one thing will keep oil consumers coming back for more: low prices.

By John Rossant in Rome, with Robert Buder in Boston and Mark Maremont in London



SAUDI REFINERY: CALM BUYERS ARE GOOD BUYERS

GLOBAL WRAPUP

SWITZERLAND

After prevailing in a May 17 referendum to join the World Bank and the International Monetary Fund, the Swiss government is now after a bigger game: joining the European Community. Swiss big business, from banks to companies like Nestlé and BB, is already deeply integrated economically with EC countries. The country can't afford splendid isolation much longer.

But there will be some wrenching changes. The days of comfortable little cafés, in everything from banking to fine pricing in cafés, are numbered. Swiss companies will be under pres-

sure to change their statutes to allow takeovers by EC bidders. Eventually, restrictions on real estate purchases and work permits may have to be eased for EC citizens, and that will roil ultranationalist naysayers. So, the government will have an even tougher selling job to win a referendum on joining the EC.

MEXICO

President Carlos Salinas de Gortari recently unveiled an education reform package that is designed to pull up standards in anticipation of the North American Free-Trade Agreement. His plan calls for compulsory schooling through junior high and, for

teachers, more training and higher pay. Half of Mexican children now drop out before they reach seventh grade. Salinas' plan also splinters the powerful 1.2 million-member teachers' union, Mexico's largest, by shifting schools from federal to state control.

To push through the reform package, Salinas looked to his new Education Secretary, Ernesto Zedillo. If Zedillo, a 40-year-old, Yale-educated economist, makes it work, he could enter the small circle of presidential hopefuls for the 1994 election—joining Finance Secretary Pedro Aspe and Social Development Secretary Luis Donaldo Colosio, who are rated the front-runners.

WINNERS

The Best Product Designs of the Year

Some of the best product designs of the year were winners of the 1992 Industrial Design Excellence Awards (IDEA). If the gold winners of the 1992 Industrial Design Excellence Awards (IDEA) are harbingers, the future of American design is bright.

The strength of the IDEA winners suggests that American products is building. U.S. companies are taking old products and lots of design "smarts" into new ones. They're shifting away from an engineering-driven preoccupation with product performance to focus on how real people use products. They're not just interested in trying to hit only home runs with splashy new products. From the computer mouse to industrial tools, this year's entries prove that the best products come from existing models.

The result? As measured by this year's IDEA contest, conducted by the Industrial Designers Society of America and sponsored by BUSINESS WEEK, a product renaissance is afoot that may rival the Japanese and European surges of the '70s and '80s. "We saw an unprecedented series of excellent products, from

art and design at Pratt Institute and the University of Pennsylvania. The award is a long last of design maturity on the part of American industry."

It may be the tip of the iceberg. The jury concurred that the high quality of the power of industrial design is being harnessed by a big slice of Corporate

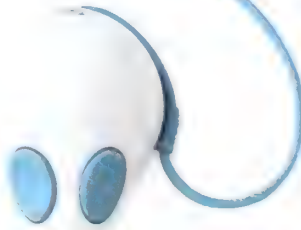
America. Devoid of decorative gewgaws and stylistic cute, the winners came from companies where design is an integral part of product development from the beginning, not added on at the end for looks. From Goodyear Tire & Rubber Co.'s amazing Aquatread tire to Apple Computer Inc.'s PowerBook, the winners have kept their focus on creating products that function well and solve specific work needs.

BIG NEWS. Nowhere is this more evident than in computers. After decades of obsession with performance—raw computing power, disk capacity, and speed—computer makers are paying much more attention to how their machines are actually used by people. They are realizing that winners are simply lost. And just as a carpenter's hammer and saw are used for different jobs, computer makers have come to see that different kinds of computers are needed for different tasks. "It's now possible to build small, job-specific computers," says IDEA juror James Bleck, president of the

Bleck Design Group in Chelmsford, Mass. "That's really new—an occurrence of the last three years as we've evolved away from big computers."

Take the gold-grabbing Texas Instruments Inc. Audit Trading Computer. Handheld and task-specific, it is designed to serve the toilers in the pits of the Chicago Board of Trade. TI designed it to work with a regular pen or pencil, since traders use pens and pencils to write their trades on slips of paper. The product had to be small enough to fit in the palm of a hand and rounded so that no one would get hurt in the shouting and shoving that goes on in the pits. "I was careful that if somebody got whacked in the head with it, sharp edges wouldn't injure them," says Bleck. The Chicago Board of Trade is testing the Audit Trading Computer against two other handheld devices and the traders will soon choose the one they prefer.

TI's trading tool is part of a new breed of tiny computers, called



KIDZ MOUSE
BY FROGDISEIGN
FOR LOGITECH

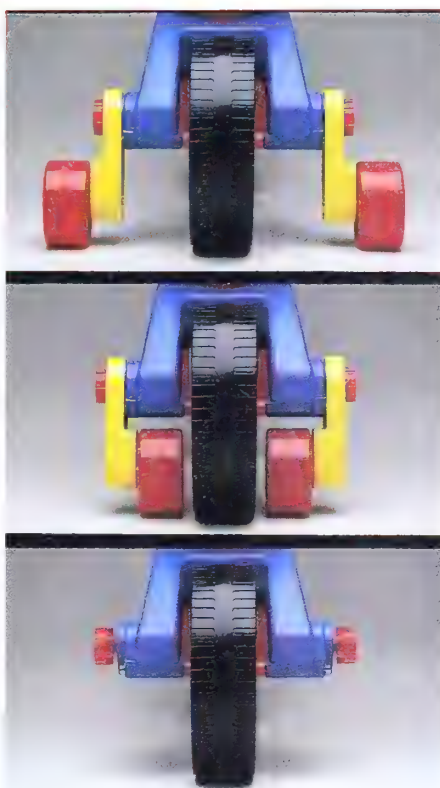


ewlett-Packard Co.'s Imtop 95LX and Federal Express Corp.'s SureTracker Scanner, at are optimized for particular jobs. Hand-held foreign-language translators, spelling checkers, and the ubiquitous electronic organizers are other examples of convenient, job-specific computers.

Apple predicts that these machines will evolve into what it's calling PDAs, or personal digital assistants. The company began showing off its first PDA, the bbed Newton, in May, and it expects production to begin in Japan early next year. Newton is sort of a jazzed-up PDA. It's a Wizard organizer that accepts hand-printed input on its screen and can send and receive faxes.

BIKER TOY. The growth of "smart" tools goes beyond specialized computers. Digital technology is being embedded in tools to make them more precise and easier to use. The SmartLevel Series, an electronic carpenter's tool, won a bronze award. Designed by Andrew Teller at Wedge Innovations in San Jose, Calif., and Blake Wharton of GVO in Palo Alto, the SmartLevel allows weekend carpenters as well as professionals to determine "level" and "plumb" and measure angles through 360 degrees. Instead of a float-bubble, there's a liquid-crystal display. At about \$50 re-

**HASBRO'S
PLAYSKOOL
1-2-3 BIKE
WITH
ADJUSTABLE
WHEELS**



**AUDIT
TRADING
COMPUTER FROM
TEXAS
INSTRUMENTS**



tail, the SmartLevel is easy for most homeowners to use and can survive a two-story drop.

New technology doesn't have to be electronic. One of the most interesting examples of revitalizing a tried-and-true product is Spalding Sports Worldwide's gold medalist, the AirFlex baseball glove. By inserting an inflatable bladder into the mitt, Design Continuum Inc. has come up with a glove that fits any hand without months of break-in (page 57). The Boston-based design house pioneered the technology when it helped Reebok International Ltd. come up with The Pump sneaker, a half-billion-dollar product line to date.

Another way that old, reliable products have been given new twists is a process called universal design. This involves adapting products for the elderly or physically challenged and in the process, making them more useful to everybody. Gold medals in 1992 went to two such products: Kohler Co.'s Precedence Bath, which has a gate-like door for safer entry, and OXO International's Good Grips kitchen utensils by New York's Smart Design Inc.

A gold also went to Ingersoll-Rand Co.'s worker-friendly wrench for automobile assembly. Group Four Design Team in Avon, Conn., created the ergonomic tool with input from Detroit assembly-line workers (page 64). Its adjustable handle and soft grip help prevent the repetitive-motion injuries often associated with conventional industrial tools.

Many of this year's IDEA winners used a new management approach called product-mapping to refine their designs. In the 1980s, leading-edge companies focused on speed-to-market and benchmarking to improve their standing against Japanese and European competitors. The paradigm for Corporate America has been to create new technology, boost performance, and get the product out the door as soon as possible. In many cases, however, the resulting products have technically impressive features that are baffling to consumers. "What do we use these bells and whistles for?" is a common complaint. A VCR that can be programmed to record 16 TV shows over two weeks is a classic example.

BULL'S EYE. Product-mapping avoids that by switching the focus from product to user, with close analysis of how people interact with machines. How do their hands have to move to operate them? Where must they look? For example, in computers, product-mapping examines the ease of setup, the feel of the keyboard and mouse, the quality of the visual display, and the difficulty of learning the software. In product-mapping, usability and desirability are as important



**OXO'S GOOD GRIPS
BY SMART DESIGN**

Annual Design Awards

as performance. The process aims to uncover what is missing for users in the marketplace and build the discovery into a bull's-eye product that elicits an "I gotta have it" reaction.

The key is refinement, not invention. "Companies understand that it doesn't matter how fast you get it there if you don't have the right product," says IDEA juror Bleck. "Getting

of the floppy-disk drive on the 170 won points because it's not blocked by airplane-seat arm rests. Both PowerBook models—the low-end 100 and the 170—scored for overall portability and for the fact that a person can use them while standing at a pay telephone. The 170 rated highest in tests measuring the two most important devices for most computer users: the



**SMARTLEVEL
SERIES 200
DIGITAL
LEVEL FROM
WEDGE
INNOVATIONS
AND GVO**

that right product into the market can generate tremendous profits. Look at the PowerBook."

Apple's PowerBook, one of this year's gold medalists, is a good example of product-mapping. Apple was already behind in portable computers when it began work on the PowerBook in 1990. Its first laptop, the Mac Portable, was technically whizzy but

heavy and cumbersome. So Apple had a lot riding on its second entry, a smaller, notebook-size machine.

Apple first studied how dozens of people operated an early prototype of the PowerBook to refine the placement of the trackball and other features. Later, it hired GVO to use product-mapping to compare the proposed PowerBook line with the competition. The process really amounted to design editing: deciding what features were used most and, equally important, which could be left out. For its PowerBook assignment, GVO devised a new kind of value analysis that goes beyond standard market research.

SPECIAL NOD. By defining and measuring 159 user-computer interactions, from opening the box to computing on an airplane, GVO came up with a notebook-usability index. The index measures peoples' experience with notebook computers, including PowerBook, over a range of user-product interactions.

For example, the PowerBook 100 and 170 models rated higher on GVO's index than AT&T's Safari, Compaq Computer's LTE, Toshiba's T2000, and five other notebook computers in tests measuring set-up procedures, especially the quality of assembly instructions. The positioning

mouse, or trackball, and the screen. The 100 tied with Ameri- can Telephone & Telegraph Co.'s Safari.

The IDEA jurors were so impressed with GVO's product-mapping methodology, covering 450 tests of usability, that they departed from their usual focus on products to give the analytical tool a bronze award. They also gave NCR Corp., now a subsidiary of AT&T, a silver for its product-mapping technique. NCR won five other IDEA awards this year, including one for its pen PC.

The market has awarded Apple an even bigger prize. In just eight months, PowerBook has become the No. 2 notebook in U.S. computer stores.

Another lesson gleaned from the 1992 IDEA winners: Designers must increasingly speak the language of engineering, marketing, and manufacturing. Successful design requires that these experts team up to figure out early on, for example, what shape can be created in what type of mold using what type of plastic. In the past, designers were often called in late in the process to supply a pretty package for a product that was essentially finished. The designer's contribution, though significant, was largely aesthetic.

Now, good industrial design is as much engineering and manufacturing as it is ergonomics and aesthetics. "Before they actually sit down and design products, designers must know how a product is made," says juror Stephen Hauser, president, S. G. Hauser Associates Inc. in Calabasas, Calif. "They must know how much materials and manufacturing cost before they can even begin."

Goodyear's runaway success, though, gold-winning Aquatred tire, could never have been brought to market if the team sculpting the intricate tread design hadn't been familiar with the arcane science of rubber

THE WINNERS OF 1992

Below are the design firms and a selection of corporations whose products won Industrial Design Excellence Awards in 1992.

DESIGN FIRMS	AWARDS			
	GOLD	SILVER	BRONZE	TOTAL
REDWOOD		4	3	7
UNITEC CONSUMERS	1	2	1	4
EMIG AMMANN	1		2	3
GROUPE FOUR	1	2		3
IDEO	1		2	3
DESIGNHAUS		2		2
GVO			2	2
LUNAR DESIGN	1	1		2
SMART DESIGN	1	1		2
FITCH R	1	1		2
MARTIN LUTHER		2		2
MEYERHOLZ		1	1	2

CORPORATIONS

NCT		3	3	6
AT&T	2		1	3
GENERAL MOTORS	3			3
HITACHI		1	1	2
GOODYEAR	1			1
THOMSON CONSUMER ELECTRONICS	1			1
KOHLER	1			1
KNOX	1			1
INGERSOLL RAND	1			1
SPALDING	1			1
TEXAS INSTRUMENTS	1			1
HERMAN MILLER	1			1
GOODYEAR	1			1

lding. Creating the unique "aqua channel" that shoves ter out of the way on wet roads required new kinds of lds that had to be created along with the tire (page 56). The gold-winning Demon Dispenser is another example of importance of engineering and manufacturing to success- industrial design. The disposable dispenser, which ICI

Americas Inc. ships along with every bottle of its Demon roach insecticide, had to be made out of inexpensive polypropylene, a material that tends to lose its shape. Tiny adjustments of the mold were needed to prevent that, so a thorough understanding of the molding process was ical to the design process (page 59). t's getting much harder for design- to get by on their products' looks. A shakeout is under way in the design ustry, and firms that offer engineer- as well as ergonomic and aesthetic ertise have the best shot at survival. ices that are primarily style-based folding. By the end of the decade, igners say, just a half-dozen indepen- t firms will dominate.

TRICK. There were many surprises this year's IDEA competition. General tors Corp. picked up three gold med- —the most a corporation has ever 1. Its winners ranged from the Cadil- Seville (page 58) to a concept for an tric-vehicle charging station submit- by the company's GM/Hughes Elec- trics Corp. subsidiary. NCR was the gest overall winner, with a total of silvers and bronzes. ltogether, 753 submissions vied for gold, silver, and nze medals in eight categories and 41 subcategories, comed with 690 last year. To be eligible to enter the annual A contest, American citizens and designers around the ld who are members of the IDSA must have introduced ir products into the market between Feb. 25, 1990, and

Feb. 25, 1992. In this year's contest, 25 entries won gold medals, 44 got silvers, and 42 won bronzes.

In the first part of the judging, the entrants are graded by a designer with specific expertise in the area. Bleck evaluated business and industrial equipment, including computers. Hauser handled medical and scientific products. Fritz May- hew, chief design executive at Ford Motor Co., did transportation. Liz Powell, director of Sony Corp. of America's Design Center, judged consumer products. Rita-Sue Siegel, an industry headhunter with a strong background in design, did packaging and visual-interface design, such as software. David Jenkins, manager of industrial design for Steelcase Inc., looked at furniture, and Aura Oslapas, a principal in A+O Studio, was responsible for graduate-student projects, trade shows, and exhibits.

HIGHER CURVE. After the first cut, the jurors convened to discuss the remain- ing contestants. Wasserman was chair- person of the entire jury. He says the level of quality was so high that many entries that won silvers this year proba- bly would have been golds last year. Two silver stand- outs were NCR's 3125 pen comput- er and a similar PC from startup Momena Corp.

The Cadillac Seville generated the most heated debate. The ma- jority of jurors were initially un- willing to give its nonbreakthrough design first place. But Ford's Mayhew convinced them that Seville's incremental refine- ments warranted a gold.

To get behind the scenes, BUSINESS WEEK takes a closer look at nine gold medalists and one silver. Each is a special and different chapter of the story of Design '92.

By Bruce Nussbaum in New York

THE TOP 10 OVER TIME

It takes dedication and genius to win year after year. Here are the best

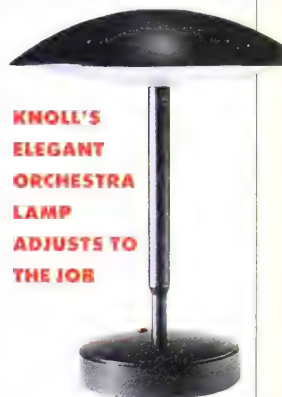
DESIGN FIRMS	1980-91	1992	TOTAL
IDEO*	20	3	23
FROGDISEIGN	9	7	16
FITCH RS	13	2	15
ZIBA DESIGN	13		13
EMILIO AMBASZ	8	3	11
LUNAR DESIGN	9	2	11
GROUP FOUR	6	3	9
DESIGN CONTINUUM	4	4	8
TECHNOLOGY DESIGN	8		8
SG HAUSER	7		7

CORPORATIONS	1980-91	1992	TOTAL
GENERAL MOTORS**	13	3	16
IBM	12		12
NCR	6	6	12
APPLE	6	3	9
CHRYSLER	7	1	8
STEELCASE	8		8
HERMAN MILLER	6	1	7
TEXAS INSTRUMENTS	6	1	7
FISHER-PRICE	5		5
CROWN EQUIPMENT	4		4

*PREDECESSORS: ID TWO, DAVID KELLEY DESIGN, MATRIX DESIGN

**INCLUDES GM/HUGHES

DATA: INDUSTRIAL DESIGNERS SOCIETY OF AMERICA



GENERAL
MOTORS'
TRALITE
CONCEPT CAR
TS
O MPG AT
MPH
THE
GHWAY



REINVENTING THE TIRE

AQUATRED

DESIGNER: GOODYEAR

Tires are boring. Three years ago, even Goodyear Tire & Rubber Co.'s advertising chief came back from a trade show convinced of that. He got top management to agree that something was needed to inject pizzazz into the product line. Officials even code-named the project "Newex," for "new and exciting."

The award-winning Aquatred is the snazzy result. A striking tire with a water channel down the center for better traction on rain-slick roads, Aquatred is an example of how a traditional product can be revitalized through

industrial design. Although the tires cost \$90 to \$110 apiece, twice the price of the average tire, more than 400,000 have been sold since Goodyear started taking orders last November. Since most Aquatred buyers would have bought another brand instead of Goodyear, that could add half of a market-share point, or more than \$50 million, almost enough to die for in this fiercely competitive business.

In-house designers and engineers at Goodyear knew that the tire would have to offer good wear and wet traction, the two things tire buyers want most. Consumer surveys also showed that a bold tread design was something tire buyers craved. Unfortunately, the team had to confront the great tire dilemma: Better traction from tires that stick to



the road means poorer wear. As for an eye-catching look, how distinctive could a tire be?

Stunning. Aquatred's unconventional channel, together with lateral grooves running into it, evacuates water from the footprint of the tire that meets the road, helping prevent droplaning, or skating on water. Other features helped, too: The leading edge of each tread block is angled and rounded, while the trailing edge is sharp and vertical. Goodrich says this design provides a more comfortable ride and better wear. The visual impact of the design is powerful. "The look communicates the function and sells it," says Fritz Mayhew, chief designer for Ford Motor Co. and the IDEA director in charge of transportation products.

'SECRET SAUCE.' The unusual tread design alone, however, would not improve wet-traction performance enough. Equally critical to the Aquatred design is a new material called SIBR (a mix of styrene, isoprene, and butadiene monomers). The special tread design combined with this "secret sauce," as engineer John Attinello jokingly calls it, allows Goodyear to give a 60,000-mile warranty on the tires. The company claims a 10% reduction in stopping distance

on wet surfaces—and a 20% reduction for cars with antilock brakes.

Even with the special compound, though, Aquatred depended on another crucial technology: Mold manufacturing. Tires are surprisingly complex products. To make one, a tire builder has to take 16 or so separate rubber pieces and wrap them around a drum, creating what's known as a "green tire." That green tire is then placed in a mold and cured. Making these molds is a painstaking art. Some doubted that such an intricate tread, which also required a wider-than-usual mold, could be made. Only with new, computerized moldmaking machinery could this be accomplished, and engineer Sam Landers, father of the Aquatred, acknowledges that "it was a mad race to the finish."

The jurors on the IDEA committee that awarded Aquatred the gold said Goodyear successfully generated an "innovative solution to conflicting objectives, wet traction vs. tread wear," and at the same time came up with a "strikingly different look that communicates its functional attributes." Pretty good for a plain old tire.

By Zachary Schiller in Akron

HIS MITT FITS THE A...

**AIRFLEX GLOVE
DESIGNER: DESIGN
CONTINUUM**

The baseball glove is hardly a product begging for innovation. It has worked the same for decades, and it works just fine. Ask any kid.

But Spalding Sports Worldwide has given the old mitty a fresh look and, actually, making it better.

Looking to boost its share of a market dominated by Rawlings Sporting Goods and Wilson Sporting Goods, Spalding is using an idea popularized by Reebok International Ltd.'s Pump sneaker and is putting inflatable bladders inside the baseball glove. Just as the Pump uses air to mold sneakers to your feet, Spalding's AirFlex uses air to pump the glove around your hand for a tighter fit.

The AirFlex won a gold medal in the IDEA's sporting fitness product category because "the glove is almost a perfect example of what industrial design is all about," says Fritz Mayhew, director in the category. "It's

new technology that's been applied in a clever way to a product that's been around for a long time."

Actually, the technology has also been around for a while. And the way it wound up in a baseball glove almost scuttled the whole project. In the late 1980s, Boston-based Design Continuum Inc. had refined the medical technology used to make inflatable splints to transform the old Reebok sneaker into the high-tech Pump. But Reebok officials were furious when they learned that Design Continuum was applying the Pump technology to a baseball glove. Reebok sued Design Continuum, claiming it had illegally shared trade secrets with Spalding in violation of their design contract for the Pump. Reebok tried to get a court order banning AirFlex from the market.

CHILLING EFFECT. From Reebok's point of view, the case represented the protection of its franchise. Pump sneakers produced \$500 million in sales during their first 18 months on the market—powerful tes-



timony to the rewards of good product design. Reebok was negotiating to license the Pump to other sporting goods companies, including Spalding rival Rawlings. It worried that if Design Continuum was allowed to design an inflatable glove, its prospective licensees would decide they could build inflatable products without paying royalties.

The case threatened the existence of Design Continuum. It also scared designers around the country, who worried that a Reebok victory could have a chilling effect on their work.

In the end, Reebok and Design Continuum

quietly settled the suit out of court. While neither side will discuss the settlement, Reebok obviously did not prevail. The AirFlex is widely available in sporting-goods stores, and Design Continuum—its reputation intact—plans to use air-inflation technology in other products. Reebok, meanwhile, says it hasn't lost any licensees. Rawlings, Bell Helmets, and Canada's CCM hockey skates will soon incorporate Pump technology. The AirFlex baseball glove is retailing at a hefty \$110, just about the price of a pair of Pump sneakers.

By Geoffrey Smith in Boston



A YOUNG-AT-HEART CADDY

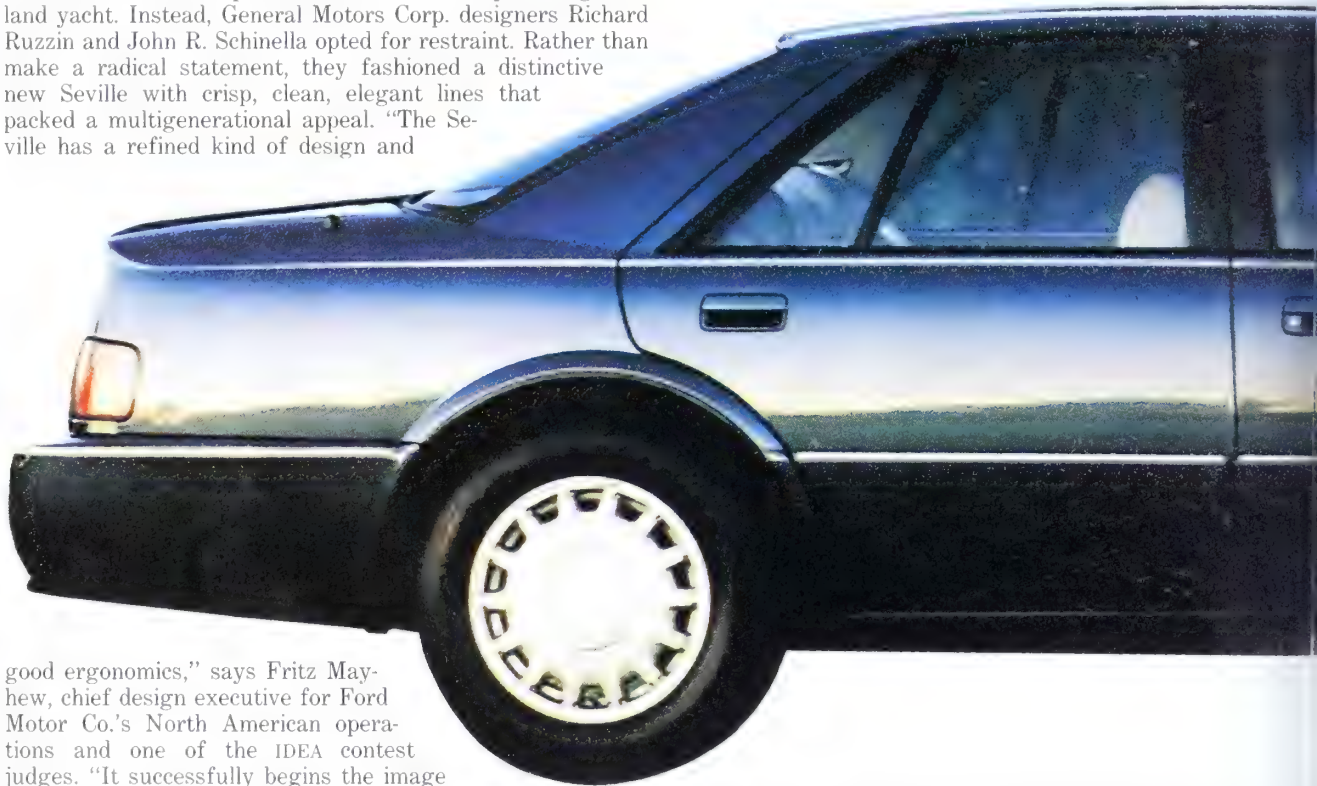
CADILLAC SEVILLE STS
DESIGNER: GENERAL
MOTORS

In a luxury-car universe populated by Infinitis, Lexuses, and BMWs, Cadillac faced a daunting problem. Upscale young buyers favored these imported sedans, which offered great quality and lavish appointments as well as motor-ing fun. Meanwhile, traditional Caddy buyers were aging quickly. How could the carmaker come up with a model that wouldn't scare off the faithful old guard while reaching out to a younger—and larger—generation of drivers?

That kind of design assignment might have produced a two-headed beast—a performance sedan masquerading as a land yacht. Instead, General Motors Corp. designers Richard Ruzzin and John R. Schinella opted for restraint. Rather than make a radical statement, they fashioned a distinctive new Seville with crisp, clean, elegant lines that packed a multigenerational appeal. "The Seville has a refined kind of design and

When Jordan returned from a business trip, he went in on Sunday to Cadillac's deserted design studio and found a full-size clay model covered with the tape and cardboard designers use to try out new lines. Jordan squinted to see the overall shape and thought: "That's it!"

Cadillac also worked hard to improve the interior details. Plastic and metal were supplanted by soft leather and tasteful accents of richly grained African zebrano wood—instead of Detroit's usual fake wood. And the seats received special attention: Instead of the shiny, almost vinyl-looking leather used by Cadillac in the past, one with a matte finish and a slightly musky aroma was selected from among 20 varieties. The design panel also put a lot of time into the door



good ergonomics," says Fritz Mayhew, chief design executive for Ford Motor Co.'s North American operations and one of the IDEA contest judges. "It successfully begins the image change of the whole Cadillac division."

Cadillac took big risks with the Seville. For starters, designers ditched the acres of chrome that have typified American luxury cars for decades. On the sporty STS model, even the grille is painted to match the body. The designers also bucked the rounded, "aero" trend that the competition favors. The Seville has some pleasant curves, to be sure. But they're set off by sharply sculpted lines, such as the creased edge of the trunk lid, that bring to mind the crisp look of a freshly pressed shirt.

WIDE WHEELS. Part of the car's visual appeal is its authoritative stance. The new Seville is wider and longer than the model it replaced, and Ruzzin and Schinella heightened the effect by setting the outer edges of the wheels flush with the sides of the car. That imparts a feeling of stability and power inside and out.

The Seville's basic design jelled in just a week. Ruzzin, Schinella, and the other Caddy designers had been struggling for months with the design of a sister car, the two-door Eldorado. They had tried and rejected three different approaches when Charles Jordan, the vice-president in charge of GM's design staff, told them to get cracking on the Seville.

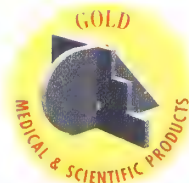
FLUB-PROOF BUG CONTROL

DEMON DISPENSER
DESIGNER: BRESSLERGROUP

If prizes were given out for homeliness, the Demon Dispenser would definitely get one. Instead, it received a gold this year for its supreme functionality. The product is designed to "visually communicate" to your neighborhood exterminator exactly

how to measure out Demon-brand roach insecticide made by ICI Americas Inc. The dispenser is built to ensure that you get just the right amount of chemical each time, without spilling. No manuals needed. Moreover, the polypropylene and styrene parts break apart easily for recycling.

It may look like nothing more than a fancy stopper, but the Demon Dispenser requires as much materials and engineering knowhow as did ergonomic expertise. It's a clear



how they looked and how they sounded when slammed. Climate controls were simplified and situated close at hand, next to easy-to-read dashboard gauges. And backseat passengers even got their own air vents and blower controls. Unfortunately, the clunky old turn-signal stalk remains, with its confusing clutter of switches for windshield wipers and cruise control.

NIMBLE FEEL. To pry yuppies out of their imports, the Seville's performance had to match its looks. Cadillac engineers firmed up the suspension, creating a surprisingly nimble feel for a car this big. They didn't sacrifice a smooth ride, either. The engine has plenty of oomph and emits a pulse-quickening, throaty growl when unleashed. Fine-tuning the engine roar had been an important ingredient in the Mazda Miata's success. GM is hoping for a repeat with the Seville.

The car does have a serious mark

against it that GM is trying to fix fast. The Detroit factory that builds the Seville still isn't delivering the flawless fit and finish in body construction that consumers have come to expect in Japanese and European luxury cars. Some Sevilles are coming off the line with uneven gaps between sheet-metal panels or with doors that aren't quite square. That may not sound like a design issue, but it is. Manufacturing and design engineers are supposed to work out such bugs jointly before production begins. Robert C. Luscomb, the Seville's program manager, says the car's exterior fit is the best Cadillac has ever produced, but still, he admits that "we didn't meet people's expectations."

Of course, customers are the final arbiters of any design's success. By that measure, the Seville is a hit. In April, sales raced 132% ahead of last year. And the car is attracting those much-needed younger customers. Since the new Seville arrived in showrooms in September, the average age of STS buyers has dropped a dramatic 11 years, to 50. Perhaps most gratifying, older, traditional Caddy buyers say they feel a bit more youthful each time they slip behind the wheel.

*By David Woodruff
in Detroit*



ample of how designers do understand manufacturing and materials are able to work with engineers to get the best product out.

FLYING BIRDS. In the case of the Demon dispenser, the designer, Peter Bressler, asked that a unit be assembled from ICI Americas' purchasing, procurement, materials, quality assurance, and marketing departments. "We insisted getting everyone involved in the process together very

early," says Bressler. "We didn't want to design something, then throw it over the wall to the engineering and supply departments only to find out later that they couldn't make it."

Teaming up early was a good move. Two problems quickly arose. First, the insecticide is an extremely fine powder that's hard to control. Second, the dispenser was going to be given away with jugs of the insecticide, so it had to be made from an inexpensive

plastic. The choice was polypropylene. It could handle the powder and was fairly cheap. But it warped easily.

Fortunately, Bressler had experience working with plastics. He and Topcraft Precision Molders Inc. subtly adjusted the mold's specifications again and again to get the polypropylene to hold the shape of the design.

A FLIP AND A TWIST. In the end, a dispenser was designed so that an exterminator puts it on top of a jug filled with roach-killer. By flipping the Demon over and twisting it, a precise amount of insecticide is measured

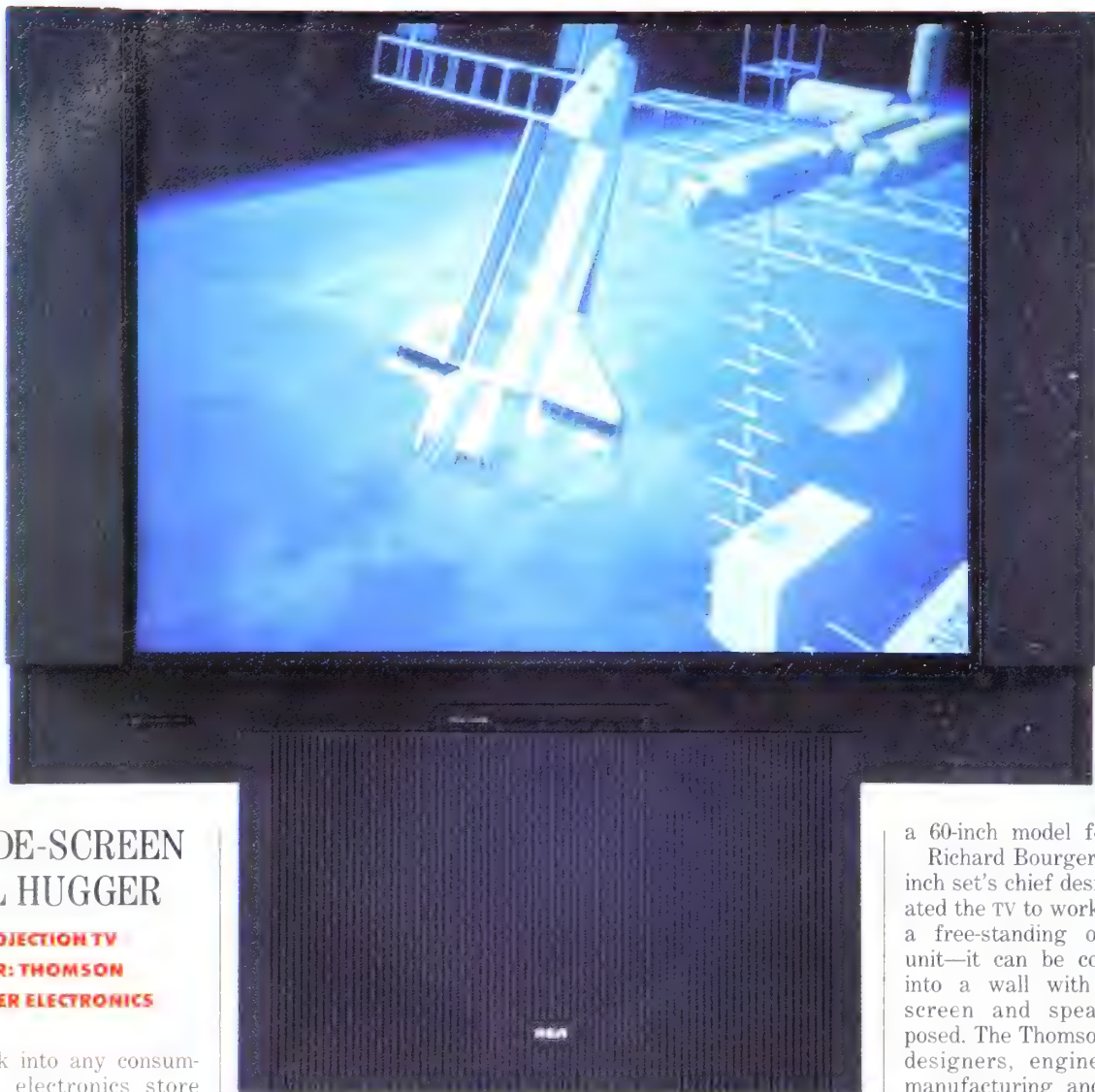
into a compartment of the dispenser. With another twist, the insecticide is released into a container of water, where it dissolves and is ready to be sprayed around the house or store.

Anyone picking up the Demon Dispenser can immediately see how to use it. "That visual communication is really the key," Bressler says. "You can't read directions every time you go out and use it."

Now, if Bressler could only design a user-friendly VCR...

By Bruce Nussbaum in New York





A WIDE-SCREEN WALL HUGGER

REAR PROJECTION TV
DESIGNER: THOMSON
CONSUMER ELECTRONICS

Walk into any consumer electronics store and you are assailed by what television makers call the "wall of eyes," a floor-to-ceiling display of indistinguishable, boxy TV sets. Even large-screen rear-projection sets don't escape this design tyranny. They're big, all right, but they're just boxes. And the styling choice? Wood grain or plastic finish.

Determined to jazz up RCA's square image, Thomson Consumer Electronics took a decidedly different approach in designing RCA's new 52-inch rear-projection television. First, it junked the box. The screen, flanked by stereo speakers covered

in gray cloth and framed in ultrathin matching gray plastic, almost seems to float above the pedestal base. The design's lightness is a sharp contrast to the impression of enormous bulkiness of most projection sets.

SLIM AND SIMPLE. The deliberate use of industrial design has helped establish Thomson's identity in the fast-growing big-screen niche, one of the most profitable in the TV business. In 1990, the French company brought in-house the development and manu-

facture of projection sets after customers and retailers complained about the sets that Hitachi Ltd. was making for the RCA label.

Since then, shipments of its RCA, General Electric, and ProScan brand projection television sets have tripled, but Thomson still has less than a quarter of the big-screen market, projected

at 400,000 units this year. The new model lists for \$2,899 and is in the middle of Thomson's range, which extends from 46-inch sets for \$2,299 to

a 60-inch model for \$3,299.

Richard Bourgerie, the 52-inch set's chief designer, created the TV to work as either a free-standing or built-in unit—it can be constructed into a wall with just the screen and speakers exposed. The Thomson team of designers, engineers, and manufacturing and marketing hands also built as compact a set as possible. The group pushed the chassis forward and took out about four inches of air space between the chassis and frame, letting the slimmer TV fit easily through 28-inch doorways.

HIGHER-FL. The IDEA jurors agreed that this slimming plus the simplicity of the elements surrounding the screen gave the TV a sense of lightness as opposed to the gigantism of most 52-inch sets.

Intent on achieving a wide-screen look, Bourgerie also tried a first for projection sets—placing the speak-



s on each side of the picture tube, rather than below. As it turns out, that approach also gives the set a much better stereo sound. The team designed in low-production costs, too. The speakers are mounted on wood baffles, but their frames are plastic. That saves the cost, to \$10 per speaker. The designers also opted for a pressure-formed backer that looks like expensive

injection-molded plastic but is made with low-cost aluminum tooling. In total, the cabinet costs 30% less than the preceding model.

To get those savings to Thomson's bottom line, however, the 52-inch RCA sets have to sell. That will be the test of whether the team's design does stand out in the rows upon rows of boxy TVs.

By Lois Therrien in Indianapolis

OFFICE FURNITURE, AS YOU LIKE IT

**DAY FURNITURE
HIGHER: HOLLINGTON &
SOCO; HERMAN MILLER**

Churchill's footsteps. A height-adjustable desk is the centerpiece of his Relay line of office furniture, made by Herman Miller Inc. in Zeeland, Mich.

Hollington designed Relay to accommodate many individual

work styles and enable quick changes in office layouts for employees teaming up on projects. Relay goes far beyond rearrangeable cubicles of today's open-office furniture systems. In Relay, individual pieces of furniture are light and movable; some even have wheels. For privacy, Relay employs movable folding dividers similar to oriental screens. The whole idea is user-adjustability and user-changeability, to make things are in such a state of pandemonium in offices today," says IDEA judge David Jenkins, a leading seat-designer at Steelcase Inc.

REAL TRUTHS. For inspiration, Hollington looked at how the real home is furnished. Household furnishings seldom change, he noted. Most homes have an eclectic mishmash of styles arranged in a functional ensemble. So, Hollington designed Relay's 12 components to mesh in a similar manner. The desk is free-standing, though designed to "dock" with the other pieces.

There is a touch of irony in Hollington's use of the home as a conceptual source for his office furniture. The office, according to Hollington, originally evolved out of the home study,

Winston Churchill preferred to work standing at his desk. Now, another Brit, designer Geoff Hollington, has made it easy for everyone else to follow

a room set aside as a comfortable place to work. During the 20th century, however, the office became more and more like a factory. The influence of time and motion studies and mass production turned the physical environment into a bland and sterile place. Relay turns the office back into a friendlier environment.

Hollington designed some slick, user-friendly details into Relay. The Relay desk, for example, is designed so that its height can be adjusted quickly, and it features a hinged top that forms a type of easel for propping up books and papers. To tame the tangle of electrical, computer, and telephone wires, all rectangular tabletops have a rubber-lined notch that acts as a cable guide. Then there's the pull-out "breadboard" in the credenza that functions as added work space or makeshift lunch counter.

Relay's flexibility was such a radical departure that Herman Miller used an unusual technique to test the concept. Hollington's first Relay design had been killed because its components could not be fastened together easily by office workers. So in 1989, the company gave eight employees prototypes of a new Relay system, then videotaped them using it. They quickly warmed to its malleability, shifting pieces more frequently than Hollington anticipated. Some altered the desk height as often as every few minutes. They also pulled wheeled tables and stands into tight wagon-train-like clusters, to create a larger work space.

The designer also used the tapes to fine-tune the components. For example, he added shelves to the credenza at heights that are handy to the adjustable desk. And it was obvious that office employees rarely used the line's small, rolling "tool caddy," so it got the ax.

STYLISH ECHOES. Visual clutter could have been a problem with such a loose-knit bunch of furnishings. But Hollington links Relay's disparate components by employing similar styling cues throughout. The credenza's feet are smaller versions of the end table pedestals. And the cantilever bases of the larger work tables echo the skeletal supports on the adjustable desk. The bases are user-friendly, too: Workers' legs can swing around easily as they scoot about the office in a chair.

Herman Miller officials figure few companies will move immediately to Relay. That's why the new system is designed to mesh with the old. But the company is also betting more people will cotton to the idea of standing at their desks instead of sitting on their glutei maximi all day.

By David Woodruff in Detroit



PEOPLE
WORK
TOGETHER. THEIR
WINDOWS
APPLICATIONS
SHOULD, TOO

If you're considering a move to Windows™ and find yourself confronted with a choice of which software applications to evaluate, stop for a moment. And imagine a suite of individually outstanding Windows applications. Yet, fully integrated to make sharing information between them easier than ever. There's Lotus® 1-2-3®, Ami Pro®, Freelance Graphics™ and cc:Mail™, a spreadsheet, a word processor, a presentation graphics program and an electronic mail product. All in one package. All from Lotus, the software company that understands the benefits derived from people and applications Working Together.™

We call it SmartSuite.™ Because each product has been intelligently designed to offer the ultimate in ease of use, integration and network connectivity. With one common interface. And with common features like our revolutionary SmartIcons™ that give you easy one-click access to your most frequent tasks. So if you're ready to take advantage of the Windows environment, call Lotus at 1-800-872-3387, ext. 6769.

After all, SmartSuite allows you to work with four award-winning products that work together.

For less than the price you'd expect to pay for two. Which, we believe, also makes it a very smart choice.



Lotus SmartSuite

© 1992, Lotus Development Corporation. All rights reserved. Lotus and 1-2-3 are registered trademarks and Ami Pro, Freelance Graphics, SmartSuite, SmartIcons and Working Together are trademarks of Lotus Development Corporation. Windows is a trademark of Microsoft Corporation. cc:Mail is a trademark of cc:Mail, Inc., a wholly-owned subsidiary of Lotus Development Corporation.



ONE WRENCH FITS ALL

D SERIES ANGLE WRENCHES
DESIGNER: GROUP FOUR
DESIGN

Until recently, industrial power tools were designed around what

they did. Maximizing power and performance was the only goal. Workers were expected to adapt to the tools. The result? On the assembly line, 200-pound men and 130-pound women have been forced to use the same tools. Workers have wrapped handles in tape and used other ad hoc measures to make the tools more comfortable—and safer. Despite their

efforts, cumulative trauma injuries (CTI), a category of repetitive-motion maladies, have become a growing health problem in the workplace.

Ingersoll-Rand Co., with help from Group Four Design in Avon, Conn., is building a new generation of power tools that could prevent some injuries. Working from the outside in, they're focusing on the operator as well as the tool. The "D Series of Angle Wrenches, used in car, truck, or tractor assembly, is the second gold winner for the company. Last year, it won for the Cyclone Grinder, another ergonomic industrial tool used for polishing steel pipe and other metals.

Interdisciplinary teamwork was crucial to the success of the wrench. From the start, Phillip Federspiel, CEO of Group

COLOR IT USER-FRIENDLY

DIGITAL COLOR COPIER
DESIGNER: XEROX CORP.

Making copies can be frustrating, even maddening. Either the wrong paper is loaded in the bin, or the toner is running low, or the machine is set to reduce everything by 40%. And punching all those little buttons never seems to get the right results. Throw in the complexity of color copying, and you're talking real stress. Xerox Corp. engineers have heard it all. So in 1988, they set out to design a walk-up-and-use copier. Last September, they introduced the Xerox 5775 Digital Color Copier—a friendlier and much smarter machine.

The key is a color touch-screen that sits on top of the machine and makes you smile even before you start: Its display of editing icons includes a light bulb inside a

person's head. Touch it, and it allows you to use electronic "cut and paste" to merge one original with another or color-fill a pie chart.

DETOUR. And when that bugaboo of copiers—a paper jam—happens, not to worry. Doors in the front of the machine open, and the paper-handling system slides forward, exposing color-coded prompts that show a novice just how to clear jams.

From the beginning, the team of Xerox designers knew they wanted to employ a touch-screen monitor rather than to use digital readouts and buttons, says Gilbert Hatch, chief engineer of the color

development department. "We wanted a person to be able to walk up and make copies, and that drove us into an on-line help system, where pressing an information button will bring up a set of help screens. That was one of the key design elements."

But there was a detour on the way. The first screen was black and white. To





r, joined with Ingersoll-Rand
ject Manager Steven Thiry and
representatives from the company's
ufacturing, engineering, marketing, and purchasing de-
ments. "When you start changing designs radically, as
did with the wrench, you have to change vendors for
erent materials and services, so getting purchasing in on
core team right away is very important," says Federspiel.
you wait to the end, it's extremely difficult to find the
s and processes."
roup Four first surveyed assembly lines around the coun-
from Chrysler Corp. auto plants to Caterpillar Inc. fac-

tories. They found
that one-third of the workers in
these plants are now women. Even

though the women have to use the same tools as men, their
hands are as much as two inches smaller in length. Angle
wrenches deliver torque to fasteners and, as a result, put a
lot of force and pressure on the hand. Holding an object that
is too big or too small makes gripping harder and can lead to
CTI syndrome. Both men and women wanted lighter, easier-to-
use fastening tools. No one, they said, had ever asked them
how to fashion the tools they needed to do their job. At least
not until members of Group Four came to their plant.

AMBIDEXTROUS. So Group Four fashioned a handle that can
be adjusted for three hand sizes in just two seconds on the
line. The handle is made out of soft polypropylene, which
helps the operator's grip. The polypropylene acts as an insulator, keeping the
hand warm as well. Previous angle
wrenches were made out of steel, and
assembly line workers had either
wrapped the handles in tape or worn
gloves. Finally, the design team in-
creased the length of the wrench, which
reduces "torque reaction."

To improve flexibility and balance, the team moved the
power inlets to the top of the wrench. It also made the
wrench ambidextrous—the forward/reverse controls were de-
signed for both left- and right-handed people. Finally, the
team switched from steel to composite materials to reduce
weight. Reinforced nylon was used for the exterior motor
housing.

The Angle Wrench comes in two forms: powered by com-
pressed air or DC electricity. Ingersoll-Rand says Japanese
auto makers are interested in the electric version because it
allows the manufacturer to collect data, analyze it, and con-
trol quality. By tracking the information, a computer can tell
the manufacturer what the acceptable quality range is for a
product and when that range begins to be exceeded on the
line. That means the system can warn assembly workers, for
example, when their fastening is just at the point of crossing
the line into "not acceptable," allowing them to make the
correction without shutting down the line. With some com-
plex computerized manufacturing systems, the computer will
make the correction automatically, without consulting the
workers. Japanese auto makers liked this aspect of the Angle
Wrench as well as the adjustable handle, which provides a
grip for the smaller Japanese hand.

The biggest fans so far of the Angle Wrench are at Chry-
sler. In fact, workers insisted on it at the company's showcase
Jefferson Avenue factory in Detroit, where the new Jeeps are
built.

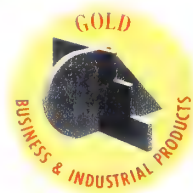
By Bruce Nussbaum in New York



choose a color, a person
would have touched a block
that said "red" or "green."
Tryouts with focus groups
showed that color display
would make a huge differ-
ence: It was able to get in-
formation across faster and
more accurately, reducing
the time spent on each task.
So Xerox added a more ex-
pensive color screen, and
people now see squares of
color—labeled for the color-
blind—to choose from.

The 5775 is a \$46,500 pro-
duction machine that makes
7.5 full-color copies a min-
ute. You're not likely to find
it down the hall, although it
can link up to PCs or Macin-
toshes to act as a color print-
er. Its target market is cor-
porate print shops, copy
shops, commercial printers,
and large marketing depart-
ments. But Xerox set out to
make the machine easy to
use and even inviting for
anyone. The front of the ma-
chine is a "gentle curve—
very subtle," says Hatch.
"Our products in the future
are going to be gentler,
rounder."

*By Barbara Carlson in
Stamford*





PACEMAKING SOFTWARE

FIT APPLICATION

DESIGNER:

SPECTRALOGIC INC.

If you've ever shopped for a computer, you've dealt with issues of compatibility: Can I run program A on machine B? Will disk X fit in drive Y?

Believe it or not, cardiac surgeons face far more complex compatibility problems every day—right in the operating room. There are scores of replacement pacemaker models, and just as many

different connectors for attaching them to the wires ready in patients that lead the heart. One mismatch and...

The good news is that pacemaker manufacturers keep technical specialists waiting by the phone day or night just to advise surgeons, who often call during an operation. The bad news is that those specialists must track more than 1 million possible combinations of pacemaker and connectors. Until recently, the specialists at Medtronic Inc., a Minneapolis pacemaker company, made do with paper files. But new software designed for them by SpectraLogic

WELL WORTH THE WAIT

POWERBOOK

DESIGNER: APPLE

COMPUTER/IN DESIGN/

LUNAR DESIGN

Apple's manager of industrial design. "It can be beneficial—and it can drive you crazy."

It can also result in one heck of a design hit, such as Apple's PowerBook series of notebook computers. Apple introduced its PowerBooks last October, nearly three years after competitors shipped the first notebooks and in the wake of its own belly flop, the Macintosh Portable. In short order, PowerBook's special design has made it a standout in a dizzying field of 300-plus notebook machines.

PowerBook's success is actually tied to its late entry. Apple was able to use that time to analyze how people interacted with existing notebook computers and then draw up its plans for a much better mousetrap. "We're the last ones to get into the notebook computers," says Brunner, "but we built a product that blows people's socks off."

Apple refined the existing rectangular shape of notebooks to give PowerBook a distinctive minimalist appearance. Most important, however, it set priorities for the notebook's functions, giving prominence to those that people use most frequently.

PLUM ASSIGNMENT. "You have to think about how people work," says Brunner. "It's just using common sense." Brunner, 34, co-founded Lunar Design Inc., a respected Silicon Valley company. He came to Apple in January, 1990, when CEO John Sculley asked him to build a world-class corporate design team. By then, Brunner had worked as a consultant to Apple for two years and had helped design one of Apple's hits, the Macintosh LC. Brunner couldn't pass up Sculley's invitation. "I just think of coming here as getting an MBA in design management," he says. "If you can do it here, you can do it anywhere."

Brunner and his team spent four weeks getting the basic

notebook design down. The biggest head-scratcher was where to place the large trackball, a pointing device that works like a mouse. The trackball is the most frequently handled part of the computer, and it's essential for the sweeping gestures used to operate Mac's graphical software.

In most portables, a trackball or mouse is treated as an afterthought, attached to the side like an appendage. Brunner's designers wanted to change that. But they were stumped. Then, typical of Apple's free-for-all culture, an engineer chimed in with a suggestion: Why not create a flat space just below the keyboard? The trackball could be placed in the middle, and the remaining space would make a convenient palm rest. That would make the trackball easier to use—and make PowerBook a winner for both lefties and righties.

FLIP-DOWN FEET. Then there's the hotdog-shaped screen hinge instead of the usual double hinges. Window-dressing? Not at all. Apple found that the design would make it easier for people to tilt the lid and adjust the screen's angle. Ditto for the flip-down back feet. They set the computer's base at a slant for easier viewing and typing. All the ribs on the outside of the case that give the PowerBook its distinctive look also keep the portable from getting scuffed or dinged in its travels. Says James Bleck, an IDEA juror: "The product doesn't have an extraneous detail. Everything there is for some functional purpose. There are no gewgaws."

Before going into production, Apple used six different studies involving 68 people to get reactions to the design. Did they like the placement of the trackball? What about where the on-off and brightness buttons were placed? Was the whole package easy to use? Even coming up with the computer's color—slate gray—was no snap decision. Apple employees went to Atlanta's airport and quizzed travelers they saw lugging laptop PCs. Their findings: Dark colors were seen as more important, more valuable, powerful.

The bottom line: a design that's practical but playful—Apple trademark. Brunner describes the PowerBooks as being "mildly irreverent," by which he means that the machine is serious yet appealing and fun to use. "You don't want something that looks like it's going to shoot off your



... of Atlanta, uses innovative graphics to help identify the right combinations quickly and without error.

SpectraLogic's big challenge was to make it easy to navigate through a complex and continually growing data base. In 1990, a new industry standard called for every pacemaker and controller to be redesigned, effectively doubling the amount of data involved.

It was clear from the start, recalls P. Randolph Carter, director of industrial design at SpectraLogic, that only a graphical display could do.

Ultimately, after lots of fiddling around," Carter

came up with a grid of intersecting rows and columns representing selected pacemakers and connectors. At each intersection appears a symbol appropriate to that combination—red bars indicate danger, for instance.

NEAT. The so-called Fit program runs on Apple Computer Inc.'s Macintosh, which has advanced graphics software. But Medtronic keeps the actual data on an IBM PC-compatible computer, which funnels it to a network of Macs.

Carter is proudest of the look and feel of the program. Its neat, concise ap-

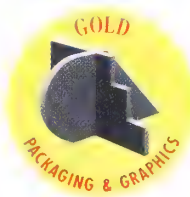
pearance, he believes, inspires confidence in the answers it provides. His main innovation was turning the square matrix on its corner so that the labels for both rows and columns can appear horizontally and are thus easily read.

The lesson from this assignment, says Carter, is that while computers have amazing powers to manage data, their graphics are often confusing. He reckons that industrial designers "lost control of the interface between person and product" with the advent of microelectronics in

the 1970s. But designers can rectify that if they work with programmers right from the start. "You can't come in two weeks from the end of the project," he says.

The Medtronic system he devised does more than help surgeons. While it's providing advice, the system also records information about what kinds of data are being requested. Later, that gives Medtronic's marketing department a better idea of product trends and what the competition is up to. Soon, Medtronic's field reps will carry a laptop version with them on sales calls.

By John W. Verity in New York



...k, but you don't want another boring box, either." Boring it's not, and that's why the PowerBook is the corner of choice within the industrial-design community. "I look on it everywhere," says Tucker Viemeister, a partner at New York-based Smart Design Inc. "On airplanes, in the office, at home. I write on it, design on it, do bills. Whatever I need to do, I can do on the PowerBook." The PowerBook experience showed Brunner that having 100 self-styled design experts around may be crazy all right. Just call it inspired insanity.

By Kathy Rebello in Cupertino, Calif.



THE 1992 IDEA WINNERS

BUSINESS & INDUSTRIAL PRODUCTS

GOLD

Audit Trading Computer Texas Instruments, Dallas, for Chicago Board of Trade and Chicago Mercantile Exchange, Chicago
CleanWorks Bally Design, Pittsburgh, and Brandenburg Design & Engineering, Austin, Tex., for Scott/Sani-Fresh International, San Antonio
D Series Angle Wrenches Group Four Design, Avon, Conn., for Ingersoll-Rand Power Tool Div., Liberty Corner, N.J.
PowerBook Apple Computer, Cupertino, Calif., In Design, Aptos, Calif., and Lunar Design, Palo Alto, Calif., for Apple Computer

SILVER

3125 NetPad NCR, Augsburg, Germany, and Phoenix Product Design staff, Stuttgart, for NCR, Dayton, Ohio
Digital Color Copier Xerox, Rochester, N.Y.
Metraloop Metraflex, Chicago
Momenta Pentop Computer Braund Creative Design, San Francisco, for Momenta, Mountain View, Calif.
ON.IX Designwerks, Alamo, Calif., for Innovative Technologies, Houston
Scale Printer Fitch RichardsonSmith, Worthington, Ohio, for Toledo Scale, Worthington, Ohio
Series 300 IC Wood Sanding Machine Desbrey Design, Minnetonka, Minn., and Timesavers, Minneapolis, for Timesavers
Spectrum NDT Transducer System Designhaus, Seattle, for Staveley Sensors, East Hartford, Conn.

BRONZE

250T Therm-A-Bind System Herbst LaZar Bell, Chicago, and General Binding, Northbrook, Ill., for General Binding
ACL DST-800 Boeder Design, Livermore, Calif., and Ampex, Redwood City, Calif., for Ampex
Business Class Headphones BPV/SDA, Hoordorp, the Netherlands, for KLM Catering Services, the Netherlands
CM-5 Massively Parallel Supercomputer Thinking Machines, Cambridge, Mass., Maya Lin, New York, N.Y., and Marc Harrison Associates, Portsmouth, R.I., for Thinking Machines
PalmPad IDEO Product Development, Palo Alto, Calif., and GRiD Systems, Fremont, Calif., for GRiD Systems
Pathfinder Cable Locator Kemnitzer Design, Overland Park, Kan., and Rycum Instruments, Raytown, Mo., for Rycum Instruments
PoquetPad Taylor & Chu, San Francisco, Poquet Computer, Santa Clara, Calif., and Fujitsu Ltd., Tokyo, for Poquet Computer
Saf-T-Loc Braking System Metaphase Design Group, St. Louis, and Savvy Engineering, St. Charles, Mo., for Saf-T-Loc, St. Louis
Signature Capture Terminal Design Central, Columbus, Ohio, and NCR, Dayton, for NCR
Trackman 2 frogdesign, Menlo Park, Calif., for Logitech, Fremont, Calif.

CONSUMER PRODUCTS

GOLD

AirFlex Glove Design Continuum, Boston, for Spalding Sports Worldwide, Chicopee, Mass.
BeeperKid A - H International, Honolulu, and Kennedy Design, Mill Valley, Calif., for A - H International
Good Grips Kitchen Utensils Smart Design, New York, N.Y., for OXO International, New York, N.Y.
E-Z Router Ryobi Motor Products, Pickens, S.C., and Industrial Design Associates, Atlanta, for Sears Roebuck, Chicago
Rear Projection TV Thomson Consumer Electronics, Indianapolis

SILVER

1-2-3 Bike Preschool R&D, Hasbro Playskool Div., Pawtucket, R.I.
Dive-Alert Ideations, design inc., Seattle

Key Chain Security Remote Transmitter Group Four Design, Avon, Conn., for Audiovox Corp., New York, N.Y.
kidz mouse frogdesign, Menlo Park, Calif., for Logitech, Fremont, Calif.

Metrolblade Design Continuum, Boston, and Jen Jen International, Dunstable, Mass., for Rollerblade, Minnetonka, Minn.

Portions Wayne Husted Industrial Design, San Francisco, for TCB Inc. Concepts Plus Div., Minneapolis

Romer frogdesign one frogdesign, Menlo Park, Calif., for Romer GmbH, Neu-Ulm, Germany

Seatcase Compact Wheelchair Jarke-Thorsen Products, Austin, Tex., Beach Mold & Tool, New Albany, N.Y., and GE Plastics, Pittsfield, Mass., for Jarke-Thorsen Products

Showbox Photo Viewer frogdesign, Menlo Park, Calif., Showbox Systems, Landquint, Switzerland, D&A Design & Advertising, Zurich, and Design Continuum, Boston, for Barnes of Boston, North Smithfield, R.I.

Speedo SwimMitt XT Aquatic Cross Training Gloves Sports-Mitt International, Berkeley, Calif., for Speedo, Van Nuys, Calif.

Squeje Aqua Tooth Polisher Interform, Menlo Park, Calif., and Squeje, Menlo Park, for Squeje

T-245 Metropolitan Toaster Black & Decker, Shelton, Conn., and Smart Design, New York, N.Y., for Black & Decker

BRONZE

Binoculars frogdesign, Menlo Park, Calif., for Carl Zeiss, Aalen, Germany
CatsEye Candle Holder Handler, New York, N.Y., for Design Ideas, Springfield, Ill.
Infinity Radio Control Designworks/USA, Newbury Park, Calif., and Airtronics, Irvine, Calif., for Airtronics
Kool Mate 36 Igloo Products, Houston, and Data Electronic Devices, Salem, N.H., for Igloo Products
LePet Cafe O'Donnell Pet Products, Long Beach, Calif.
Multiple-scale Fretboard Novax Handcrafted Guitars, San Leandro, Calif.
SmartLevel Series 200 GVO, Palo Alto, Calif., and Wedge Innovations, San Jose, Calif., for Wedge Innovations
Terrace Siler Siler Ventures, Lake Oswego, Ore.
Toothbrush Emilio Ambasz Design Group, New York, N.Y., for Sunstar, Osaka, Japan

DESIGN EXPLORATIONS

GOLD

Electric Vehicle Charging Concepts IDEO Product Development, Palo Alto, Calif., and Hughes Aircraft, Torrance, Calif., for Hughes Aircraft Div., General Motors, Detroit
Handkerchief TV Emilio Ambasz Design Group, New York, N.Y., for Brion Vega Milan
Ultralite General Motors Design, Warren, Mich., for General Motors, Detroit

SILVER

Combination Locks: Hasp, Cable, and Gun Locks Martin Smith and Leonard Porche, Los Angeles
Fujitsu Attache Portable Computer Serbimski Machineart, Hoboken, N.J., and Master Model Makers, Queens, N.Y., for Fujitsu Ltd., Kawasaki, Japan
GunSafe Martin Smith and J. B. Kit DiCarlo
The Search for Design Excellence Metaphase Design Group Inc., St. Louis, NCR, Dayton, and Design Science, Philadelphia, for NCR
Io Positional Track Light Tim C. Repp in New Hartford, Conn., and Richard Barbera in Canton, Conn.
Mia Breast Pump Palo Alto Design Group, Palo Alto, Calif.

BRONZE

"Apple PowerBooks vs. PCs" Product Value Analysis GVO, Palo Alto, Calif., and Design Consortium, Worthington, Ohio, for Apple Computer, Cupertino, Calif.
Soft Notebook Computer Emilio Ambasz Design Group, New York, N.Y.
Telecommunication Console Bell Northern Research, Ottawa, for Northern Telecom, Vienna, Va.

ENVIRONMENTAL DESIGNS

GOLD

Lee Trade Show Exhibit Booths Fitch RichardsonSmith, Worthington, Ohio, for Lee Co., Merriam, Kan.

SILVER

Recyclery Education Center West Office Design Associates, San Francisco, for Brown-Ferris Industries, San Jose, Calif.

FURNITURE

GOLD

Orchestra Desktop Lamp The Knoll Group, New York, N.Y.
Precedence Bath Kohler Co., Kohler, Wis.
PROTEX Work Envelope System Pelican Design, Spencer, N.Y., and Proformix, Whitehouse Station, N.J., for Proformix
Relay Furniture Hollington & Associates, London, and Herman Miller Inc., Zeeland, Mich., for Herman Miller

SILVER

Cachet Articulated Stamp Machen Montague, Charlotte, N.C., for U.S. Stamp, Oxford, Calif.
Crime Shield Window Barriers Product Solutions, Wilkes-Barre, Pa., and Exeter Architectural Products, Wyoming, Pa., for Exeter Architectural Products
Jardin 'Collection Fleury' Garden Furniture frogdesign, Menlo Park, Calif., for Jardin, the Netherlands
'vik-tri' Stacking Chair Dakota Jackson, New York, N.Y.

BRONZE

Imagine Precision Manufacturing, Montreal
Mirage Chaise Lounge Brown Jordan, El Monte, Calif.
ROLLiter Inventure Development, Gardena, Calif., Scott Voorhees and Tim Parsey for Inventure Development

MEDICAL & SCIENTIFIC PRODUCTS

GOLD

Chinitron Elexis Air Fluidized Therapy Huck and Studer Design, Gladstone, N.J., and Support Systems International, Charleston, S.C., for Support Systems International
Demon Dispenser Bresslergroup, Philadelphia, and ICI Americas, Wilmington, Del., for ICI Americas

SILVER

30 Series Clampmeters John Fluke Mfg., Everett, Wash.
Direct Manual Braille Slate Martin Marietta Energy Systems, Oak Ridge, Tenn., for Matrix Tool & Mold, Oak Ridge
Flexible Endoscope Group Four Design, Avon, Conn., for Schott/Surgitek, Racine, Wis.
Kangaroo Pet Ambulatory Feeding System Sherwood Medical Co., St. Louis
Portable Privacy Station Designology, Scottsdale, Ariz., for United Blood Services Systems, Phoenix
Ultima 2000 Argon Laser System Lunar Design, Palo Alto, Calif., and Coherent, Palo Alto, for Coherent

BRONZE

Systematica 1062 frogdesign, Menlo Park, Calif., for K&V BioResearch, Germantown, Md.
BioCAD Perfusion Chromatography Workstation Design Continuum, Boston, and PerSeptive BioSystems, Cambridge, Mass., for PerSeptive BioSystems
EMT-1 uro designs, Albuquerque, for Crawford Knives, West Memphis, Ariz.
Split Second Central Venous Catheter Beeton, Dickinson Vascular Access, Sandy, Utah

PACKAGING & GRAPHICS

GOLD

Fit Application SpectraLogic Inc., Atlanta, for Medtronic, Minneapolis
White-to-Green Packaging Apple Computer, Cupertino, Calif.

BRONZE

FroxSystem User Interface Frox Inc., Sunnyvale, Calif., and Axiom User Interface, Frox
User Interface for System Manager ID Product Development, San Francisco, and Tandem Computers, Cupertino, Calif., for Tandem Computers
Visual Engineering Environment Hewlett-Packard, Loveland, Colo.

TRANSPORTATION

GOLD

Aquatred Tire Goodyear Tire & Rubber, Akron
Cadillac Seville STS General Motors Design, Warren, Mich., for Cadillac Motor Div., General Motors, Detroit

SILVER

777 Airplane Passenger Cabin Interior Teague 777 Design Group, Redmond, Wash., and Boeing Commercial Airplane Group, 7 Div., Seattle, for Boeing
Image RV Awning System Designhaus Seattle, for Carter Shades, Seattle
Rage Jet Boat Boston Whaler, Edgewater, Fla., for Boston Whaler, Rockland, Mass.

BRONZE

Electric Moto Cross Badsey Design of California, Capistrano Beach, Calif.
Yontech 105 Nissan Design International, San Diego, for Yonca Teknik Yatirim, Istanbul

STUDENT DESIGNS

GOLD

Air Bass Paolo Lanna at Art Center College of Design, Pasadena, Calif.
New Move Wheelchair Douglas D. Clarson at Art Center College of Design, Pasadena, Calif.

SILVER

BodyBoat Donna Cohn at Rhode Island School of Design, Providence
Finishing Planer Brian C. Ewing at California State University at Long Beach
Ithaca Solid-Ink Color Printer Donald Carr at Cranbrook Academy of Art, Bloomfield Hills, Mich., for NCR, Dayton
Lunar Rover Vehicle for NASA Jack Lollar, David Hobbs, Steve Zwonitzer, and Jim Catoe at Auburn University, Auburn, Ala.

BRONZE

Portable Multimedia PC Robert J. Shapiro at Center for Creative Studies, Detroit, for NCR, Dayton
Needle Carousel Randy Bernard at Auburn University, Auburn, Ala.
Agromat Paul Best, Dave Butzko, and G. Coyne at University of Bridgeport, Bridgeport, Conn., for General Electric Plastics, Pittsfield, Mass.
Pure Air Ultrasonic Humidifier Glenn Klaus at Carnegie Mellon University, Pittsburgh
Salt & Pepper Shakers Todd Zeilinger at Center for Creative Studies, Detroit
Jeep Michael Kent at Art Center College of Design, Pasadena, Calif., for Chrysler, Highland Park, Mich.
Jazzman CD Player Peter Yee at Art Center College of Design, Pasadena, Calif.
Nomadic Workstation Donald Carr and Scott Makela at Cranbrook Academy of Art, Bloomfield Hills, Mich., for NCR, Dayton
NYNEX, New York, N.Y.

“When the earthquake hit, I watched helplessly as my poor LaserJet went crashing to the floor.”



—James Cost, Chief of Police, Campbell, CA

“The LaserJet fell from about four feet,” said Police Chief James Cost, recalling the disastrous San Francisco earthquake. “I assumed we’d have to buy another one. But later, my secretary plugged it in and printed a document. It’s about the only thing that did work that day.”

Reliability is only one of many reasons more people use HP LaserJet printers than all other

laser printers combined. Some people cite innovations like Resolution Enhancement technology, which creates sharper edges and better overall print quality. Or genuine PCL5 printer language. Or the range of options, with five printers priced from \$1,249 to \$5,495.*

To hear what other customers have to



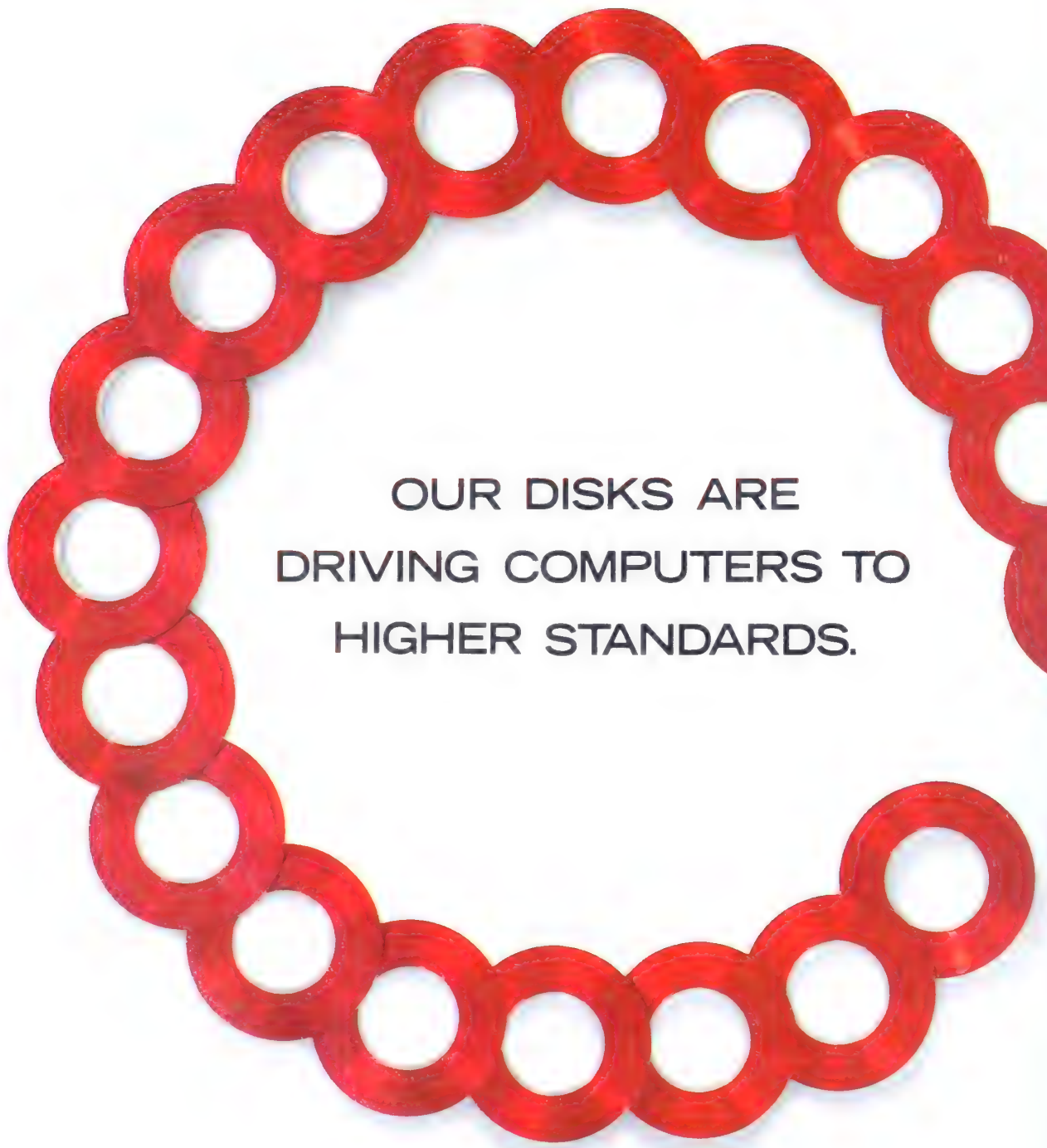
say about HP LaserJet printers, call 1-800-752-0900, Ext. 2987 for a free video. And see why so many people have an unshakable faith in HP quality.

HP LaserJet Printers.



**HEWLETT
PACKARD**

*Suggested U.S. list prices.
© 1992 Hewlett-Packard Company. HP-12250



OUR DISKS ARE
DRIVING COMPUTERS TO
HIGHER STANDARDS.

Our
newest generation of
disk drives is rated at 200,000

hours mean time
between failures.

That means they could
very well outlast your com-
puter system. ∞ We're

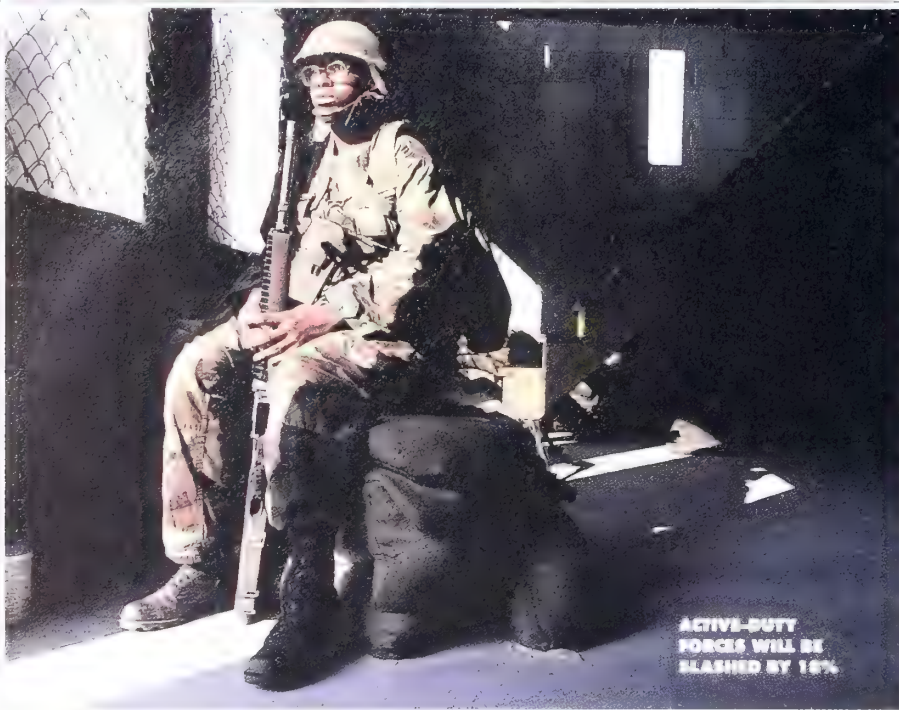
constantly redefining reliability to stand up to new technologies.

I survive the test of time. ∞ This is why leading computer
manufacturers like Tandem depend on our disk drives and tape stor-
age systems. Why MCI comes to us for the latest fiber optic trans-
mission systems. Why Sun Microsystems asked us to help develop
microprocessor chip technology that brought mainframe com-
puting to desktops across America. ∞ And one reason why
we've become the world's second largest computer maker and
a \$21 billion company. In over 100 countries, for over 50
years, we've made a name by building quality into every
product we make, from pocket-sized PCs to fiber
optic transmission systems. Today, you'll find
those products in businesses all over
America.

∞
FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

MINORITIES



WHERE TROOP CUTS WILL BE CRUELEST

For blacks, the services have been the best employer around

Over the past two decades, the armed forces have served as a de facto jobs program for black Americans. Although blacks are only 12% of the U.S. population, they hold 21% of all military positions, a fact amply demonstrated by the visible role they played in last year's gulf war. Indeed, blacks have 2½ times the share of military jobs that all other minorities have. Now, however, the sharp cuts that are planned in U.S. defense spending over the next few years are raising a disturbing prospect: One of the greatest opportunities blacks have for employment and training will be sealed back as policymakers look for ways to lessen urban despair in the wake of the Los Angeles riots.

The Pentagon will cushion the impact as much as it can. Even as the services use lower recruitment, early retirements, and voluntary and involuntary departures to cut U.S. active-duty military forces 18% by 1995, to 1.6 million, they say they'll try to maintain their percentages of blacks at current levels. Still, the number of black troops will fall

by about 80,000 from 1992 to 1995, projects Charles Moskos, a military sociologist at Northwestern University. Cutbacks will also cause 1.6 million private-sector defense jobs to disappear between 1990 and 1997, estimates forecaster DRI/McGraw-Hill. Such layoffs will hurt black employment, too, although experts say much of the damage has already been done as defense companies have shifted to the higher-skilled work forces needed to produce electronic weapons.

There's one overriding reason why the pain of the troop cuts will be more severe. The services, with their decent entry-level pay, job training, and financial assistance for college, are the closest thing many poor blacks can find to an economic ladder. At 13.6%, the jobless rate among blacks is double that for whites.

And for black teens, who will be most affected by the troop cuts, the rate is harrowing 33%. "All of us would like to see more money spent on butter rather than guns, but black Americans to a large extent look to the military for jobs and training," says John J. Johnson, military affairs director at the National Association for the Advancement of Colored People. He adds: "There's nothing there now to fill that void."

Why is the percentage of black soldiers so high? Lynn C. Burbridge of Wellesley College's Center for Research on Women has an answer. In a new study, she found that 18.6% of poor black high school students surveyed view military service more than twice the level among poor white students—view military service as their most desirable job option. The rate is even more skewed among relatively well-off students: 6.5% for blacks, just 1.6% for whites.

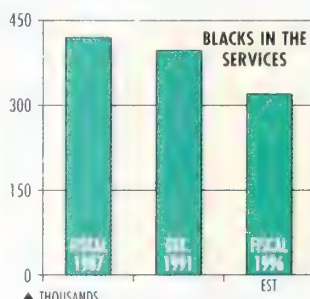
MERIT, NOT RACE. A major reason is that since the 1960s, the military has become the largest U.S. employer—and one of the best at promoting people strictly on merit, without regard to race or sex. It is also one of the few places where blacks routinely manage large numbers of whites. Only one of the large companies in the *BUSINESS WEEK* 1000 has a black CEO: He's Erroll B. Davis Jr., head of WPL Holdings Inc., the former Wisconsin Power & Light Co. By contrast, the military has 34 black generals and admirals—including top dog Colin Powell, chairman of the Joint Chiefs of Staff. "There's a perception that you can achieve more based on merit in the military," says Jeffrie Grady, a former Marine captain who is black.

As budgets are slashed, however, it's getting harder for blacks to make it into the services. With downsizing, the services have continually raised admission standards, so today's recruits usually need a high school diploma and at least average scores on a battery of tests to be accepted. Blacks fail more often than

whites to meet one of the requirements, partly because many blacks come from disadvantaged backgrounds. Today, only 25% of all black males could qualify to join the military, vs. 50% of all white males, according to Moskos. That's a dramatic drop from the late 1970s, when 50% of blacks and 80% of whites qualified.

Once in the service,

FEWER BLACK SOLDIERS



DATA: DEFENSE DEPT., CHARLES MOSKOS, NORTHWESTERN UNIVERSITY; BW

black soldiers now only qualify for administrative and support jobs rather than for skilled technology-based tasks that require more training. That's because blacks generally score lower on skills tests that determine which training programs recruits can enter. For instance, in the Army, which is 30% black, the highest of any service, only an estimated 10% of high-tech positions, such as electronic-warfare specialist, are held by blacks—while blacks hold 40% of lower-skilled logistics jobs such as termaster. "The jobs that black soldiers have aren't the technology jobs that are in demand in the civilian workforce, so the average black soldier may have a harder time adjusting to the civilian economy," says Brookings Institute researcher Edwin Dorn. Blacks have already lost ground in the private-sector defense industry. That's because more than a third of all Pentagon procurement now goes toward electronic weaponry. As that shift has occurred, says Ann R. Markusen, a Rutgers University economist and author of the recent book *Dismantling the Cold War Economy*, "a smaller and smaller percentage of defense work has gone to minorities." The reason is that few blacks are in the technical professions that do such work: Less than 3% of the country's engineers are black, for instance.

ALTERNATIVES. Of course, blacks will still be hurt by defense layoffs. Under federal equal opportunity hiring rules, defense companies have been required to increase their percentage of minority employees so that it approaches the makeup of local work forces. For instance, at Gencorp Inc.'s Aerojet division in Southern California, which has a large population of minorities, 23% of the 6,137 employees are nonwhite. That means that layoffs in such regions hit minorities hard. Less defense contracting also means less work for black contractors, many of whom have benefited from a Pentagon push to get that 5% of defense subcontracts go to minority-owned companies. Whether they're laid-off or mustered out, blacks' alternatives to defense jobs haven't improved much over the years. Unemployment has been double the white rate for decades. And blacks earn only about two-thirds as much as whites, on average. "Since, statistically, we haven't lowered discrimination in the private sector and haven't given us good alternatives for training or access to college, downsizing the military is really going to hurt," says William D. Igo II, an economist at the liberal Brookings Policy Institute. For the thousands who have invested so much in the military, that's a bitter peace dividend.

By James E. Ellis in Chicago

For All Our Sunday Drives. Together.



Crafted To Express A Lifetime.



CROSS
SINCE 1846

F A T H E R ' S D A Y — J U N E 2 1

UNQUESTIONED LIFE TIME MECHANICAL GUARANTEE

Lotte, The VIP's Choice

"The service is mainly. It's impeccable."



Earl S. Moore, Jr., President of Asia Pacific Marketing

We're pleased that a good and growing number of our guests come back to stay with us.

Why? As Mr. Moore of Asia Pacific Marketing, explains, it's the "impeccable service" they appreciate most. "Discrete and unobtrusive," in Mr. Moore's words.

While the reasons vary from one return guest to the next, they all share an uncompromising taste for excellence.

And at Lotte they find excellence in service and facilities.

Shouldn't the Lotte be your hotel in Seoul?



For Reservations: New York: (201) 944-1117, Toll Free 800-22 LOTTE, LA: (310) 540-7010, Toll Free 800-24 LOTTE, London (071) 323-3712/4
Hotel Lotte: C.P.O. Box 3500 Seoul, Tel: (02) 771-1000, Telex: LOTTEHO K23533/4, Fax: (02) 752-3758, Cable: HOTELLOTTE

CORPORATE WOMEN

PROGRESS? SURE. BUT THE PLAYING FIELD IS STILL FAR FROM LEVEL

"I don't sense a lot of progress has been made in terms of women moving up in business. That hasn't changed in a decade or more. It's the power structure that doesn't allow women entry."

—Marion O. Sandler, co-CEO and president, Golden West Financial Corp.

"I have never felt that my sex has been a disadvantage to me. There's a lot of discussion that men won't give adequate clout or power to women. Women share an equal burden for that. No one can expect to be handed power."

—Carleton S. Fiorina, Network Systems vice-president for strategy and market development at American Telephone & Telegraph Co.

It's not surprising that these contradictory views coexist as statements of the times.

The times themselves are contradictory. Women are entering companies in record numbers, women are leaving companies in record numbers. There are more females on corporate boards, there are fewer female CEOs. It's the kind of era in which a major company receives an award for its training programs from a women's group and loses a \$7 million sex discrimination suit—in the same month.

Such polarization mirrors the growing ferment over feminism itself. Women disagree on how much progress they have made in the 1980s—or if they have made any: Susan Faludi, author of the provocative best-seller, *Backlash: The Undeclared War Against American Women*, argues that women have actually lost ground in the past decade. And even those who agree about women's progress (or lack thereof) debate how best to further the cause, with attitudes ranging from just-do-your-job-well *laissez-faire* to a call for renewing activist tactics. The debate gets so heated because sexual discrimination is insidious, and when inequality is not overtly acknowledged, it's harder to address it openly. "We're still at the stage where it's a novelty to have a woman promoted," says Faludi. "And that means the playing field is not level for women."

That sense of inequality is pervasive among America's women executives, to judge by a recent BUSINESS WEEK survey of 400 female managers (page 77). While half the respondents believe that Corporate America is doing "somewhat better" in terms of hiring and promoting women, half also believe that

the rate of progress is slowing. Compared with the sentiment expressed in a similar BW poll in 1990, the mood is much downcast now. Today, 70% of those polled see the male-dominated corporate culture as an obstacle to their success. Ten years ago, only 60% thought so. More than one-third of respondents thought that in five years' time the number of female senior executives at their companies will have remained the same or fallen.

Women aren't stewing in silence, however. Three-quarters of the respondents thought women should take legal action if they see evidence of discrimination. Fully 70% also felt women should take a strong public stand on the hiring and promotion of women executives. "Clearly, there's a lot of frustration among women about the system now," says Amanda Fox, a vice president at Chicago corporate recruiters Perich & Ray Carre Orban International.

That frustration is understandable. In the early '70s, 99% of senior management was male. Now, after 20 years of "progress," 99% of senior management is still male. Five years ago, two women chief executive officers headed BUSINESS WEEK 1,000 companies. Today, only one does. Despite years of rosy predictions that women would quickly ascend the corporate ladder, their presence in the executive suite hasn't changed significantly in a generation. And female executive salaries are well below those of their male counterparts.

CRITICAL MASS. But women are starting to achieve equal representation in the lower middle ranks. Half the entry-level management corps is female (up from 15% 15 years ago), and soon the midlevel echelons will be, too. Such unprecedented numbers by necessity break down barriers. If they don't, the amount of active discrimination would be as obvious as to be outrageous," says Anne Ronce, a San Francisco-based consultant. The numbers suggest the 1990s may be the breakout decade for women. But after the glacial progress of the past 20 years, many women believe the pace of change will still be measured in smaller steps and individual victories.

In the past, women haven't reached the top because there has been no real need to put them there. Despite all the proclamations about the increasing diversity of the work force, corporate officers have still had plenty of male candidates to fill the upper ranks: "They've heard about [the demographic change] but haven't seen it or experienced it," says Mary C. Mas





CB

CATHY BLECK

vice-president for research at Catalyst Inc., a New York research firm that focuses on women in business. If a superb female candidate was under everyone's nose, fine. But the idea of promoting women has really been more of a social issue than an economic necessity.

That will soon change. While women have been packing the corporate pyramid base for years, it's only now that their presence is reaching critical mass. Even more important, while they still cluster in staff positions, a growing number of women are in so-called line jobs—those integral to company profit centers (page 80). If the first generation of senior management women made it with such titles as "executive vice-president for human resources" or "director of public relations," this second generation has a predominant number of chief financial officers and marketing vice-presidents.

The number of qualified women will soon be so great that ignoring them will not only be discrimination but bad business, some analysts argue. "Companies will want to mobilize the best talent," says Felice N. Schwartz, president of Catalyst. "So there will be intense competition to recruit, develop, and retain these women."

It may be happening already. Since

1986, the percentage of officer-level searches at Paul Ray that include women candidates has increased from 11% to 40%. Other corporate headhunters have noted a steady increase in female hires. In 1981, 5.5% of Korn/Ferry International's senior management placements were female. In 1991, the figure had jumped to 16%. In the mid-'80s, 2% of execs placed by Cleveland-based recruiters L-malie Associates were female. Last year, 10% were.

Coming off a minuscule base, these numbers do show progress. But in absolute terms, the figures still seem small. The problem is not that women haven't advanced in the corporate ranks but that they haven't advanced in proportion to their presence in the work force. Because women represented 15% of all managers in 1968, you might expect 15% of today's senior managers to be female, notes Ann M. Morrison, co-author of the 1987 book *Breaking the Glass Ceiling*. Instead, they make up about 3%, even though the percentage of women managers overall has grown to almost 41%, according to the Bureau of Labor Statistics. As for the number of women actually heading public companies, "you can count them on one hand—with fingers missing," says Golden West's Marion Sandler.

NOT IN MY COMPANY. Why aren't more women running things? The reason is something beyond natural attrition. That's the thesis of *All the Right Stuff*, a new study by a trio of professors from Loyola and Northwestern Universities. The survey analyzed the career progress of 1,000 male and female midlevel managers at 20 corporations. All were comparably educated, career-oriented, and performing similar functions. But the researchers found that over five years, the women's salary raises lagged 11% behind the men's and that the women had received fewer job transfers. "The women had done all the same things, and yet their progress was less, and they earned less," says co-author Linda K. Stroh, assistant professor of

organizational behavior at Loyola. "The women were not only disadvantaged but discriminated against."

Discrimination is something that most male—and many male—execs would deny happens in their companies. Yet, the Labor Dept. made clear in its 1991 study of nine companies, *Report on the Glass Ceiling Initiative*, gender-related bias still exists. Judy B. Rosener, a professor at the University of California at Irvine's School of Management, calls it "sex static"—a subtle, even subconscious discomfort at seeing women assume certain roles or behave in certain ways.

Last August, along with the report, the Labor Dept. announced its determination to eradicate workplace prejudice. The news has stirred the business community: 50,000 copies of the report have been distributed, and the Office of Federal Contract Compliance Programs logged some 2,500 hours three months advising government contractors.

Some women haven't waited for the feds. In 1985, Barbara Sogg filed a discrimination suit against American Airlines Inc., charging she was passed over for a plum job—general manager of operations at New York City's LaGuardia Airport—because of her age, sex, and health. A younger, less-experienced man got it.

In January, she was awarded \$1 million, which a state judge recently cut to \$3.8 million. American is appealing.

GETTING MAD. But while the case dragged on, American CEO, Robert L. Crandall, began several innovative training and management programs to identify and encourage talented women. American's Supertrack program, launched in 1988, offers evaluations of promising managers to all of the company's senior officers. Supertrack and other programs were in any way related to Sogg lawsuit, American insists. But as a result of the efforts, the percentage of women mid- and upper-level managers at American rose from 12% in 1986 to 21% in 1991.

Some women say relying on management-sponsored efforts isn't enough. Organizations such as the Fund for the Female Majority think businesswomen need to get mad. "These guys aren't going to open the doors willingly," declares Katherine Spillar, the group's national coordinator. "By playing it safe, you're gaining nothing." Figuring that "at the current rate, it will be 475 years before women reach equality in executive suites," the fund's literature urges corporate women to form in-house caucuses, complain loudly and publicly about inequities, and generally challenge the old-boy-network rule.

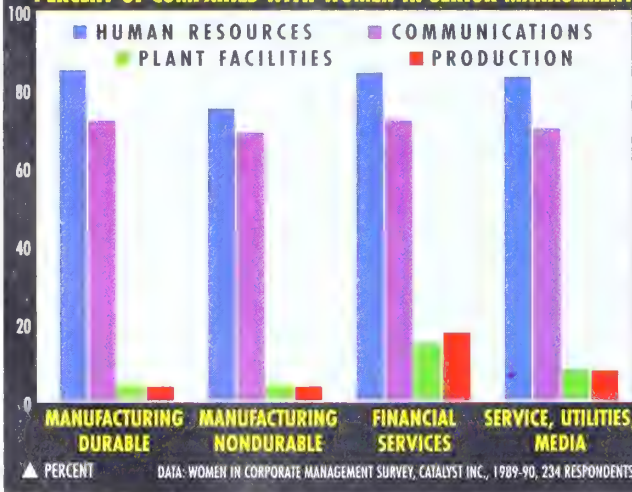
In the late '60s and '70s, organized, adversarial tactics got women into companies and paved the way for their promotions. And they can still be effective: Don't even think about getting a piece of California's \$67 billion public employee retirement fund, State Treasurer Kathleen Brown tells investment managers, unless your team includes a woman. Others fear that policies that favor women just create affirmative-action appointments. "The worst thing for women in business is a token position. It undermines them," says Lois Palmer, chief technological officer for Colgate-Palmolive.

Many of her colleagues would agree, especially those who

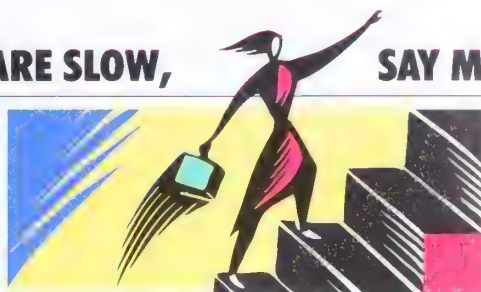
WHERE WOMEN WORK

Companies were asked what types of senior management jobs women were most likely to hold. They still tend to cluster in staff positions, not line jobs

PERCENT OF COMPANIES WITH WOMEN IN SENIOR MANAGEMENT



THE GAINS ARE SLOW, SAY MANY WOMEN



It's a telling sign of frustration: The women executives in BUSINESS WEEK's poll are succeeding in Corporate America, but they still see obstacles and discrimination all around them. A majority says there's a "glass ceiling" at their companies, where 70% also say a

male-dominated culture is an impediment to women. And 57% say the rate of progress for corporate women has slowed down or stopped altogether. No wonder they're feeling militant: Fully 76% say women should take legal action when they see discrimination.

ATING THE WORKPLACE

How would you rate large corporations generally as a place for women executives such as yourself to work—excellent, pretty good, only fair, or poor?

How would you rate your own company as a place for women executives such as yourself to work?

	Large corporations	Own company
Excellent	8%	34%
Pretty good	60%	49%
Only fair	28%	16%
Poor	1%	1%
Not sure	4%	0%

PREFERENCE

Do you prefer to work for a man or a woman, or doesn't it make any difference to you?

Man	12%	Makes no difference	83%
Woman	2%	Not sure	3%

IMPROVED POLICIES

Compared to five years ago, how do you think large companies are doing in relation to the hiring and promotion of women executives—much better, somewhat better, the same, somewhat worse, much worse?

Much better	16%	Somewhat worse	5%
Somewhat better	48%	Much worse	1%
The same	29%	Not sure	1%

EN HAVE AN EDGE

In your company today, would you say that women have the same chance as equal-qualified men to be promoted to senior management positions, or not?

Same chance to be promoted	46%
Not the same chance	53%
Not sure	1%

LARIES ARE SKEWED

If women get promoted to senior management positions, do you think they will be paid a higher salary, a lower salary, or the same salary as men in those positions?

Paid higher salary	0%
Lower salary	63%
Same salary	36%
Not sure	1%

ENTY OF ROADBLOCKS

Would you say the following are obstacles to success for women executives at your company or not?

	Is obstacle	Is not obstacle	Not sure
Glass ceiling or a point beyond which men never seem to advance	56%	41%	3%

The tendency to put women in token positions without any real power or operating authority

23% 77% 0%

A male-dominated corporate culture

70% 30% 0%

TIME TO TAKE A STAND

Do you agree or disagree with each of the following strategies?

	Agree	Disagree	Not sure
Women executives should not make waves but do a good job and expect equal recognition and promotion	34%	63%	3%
Women should build networks with other women to help each other	83%	15%	2%
Women should demand that their companies have specific written policies for the hiring and promotion of women executives	34%	64%	2%
Women should take a strong public stand on the hiring and promotion of women executives	70%	27%	3%
Women should take legal action including filing lawsuits or regulatory complaints when they see evidence of discrimination	76%	20%	4%

QUICK DECISION

If your company had to choose between two equally qualified candidates for a promotion—a man and a woman—who do you think would get the job, the man or the woman?

Man	51%
Woman	13%
Not sure	36%

MOVING SLOWER

Which one of the four following statements best describes how large American companies are doing in relation to hiring and promotion of women executives?

They are still making real improvements	39%
The rate of progress has slowed down	52%
There are no longer any improvements	5%
Things are getting worse	2%
Not sure	2%

Edited by Mark N. Vamos

Survey of 400 women executives at corporations with \$100 million or more in annual sales. Interviews were conducted Apr. 14-21, 1992, for BUSINESS WEEK by Louis Harris & Associates Inc.

Cover Story

have won top jobs during what Faludi calls "the last 10 years of silence." Unlike their predecessors in the '60s and '70s, who self-consciously—and justifiably—saw themselves as pioneers and role models, this generation of executive women puts the emphasis on "executive" rather than on "woman." Some senior execs are loath even to acknowledge their companies as particularly woman-friendly—"meritocracy" is the word they prefer. "Sara Lee is relatively neutral, and that's the only thing I can hope for," says Mary Ellen Johnson, who became the company's treasurer and top-ranked female in 1986.

'COLLECTIVE VOICES.' Nevertheless, there are signs of "corporate women finding the strength of their collective voices," as National Organization for Women President Patricia Ireland puts it. In the past year, employees at a variety of companies have formed in-house groups. Sponsoring lunches and panel discussions, these organizations are hardly militant. Yet, "merely having a public network is in a sense doing something activist," says Vicki Kramer, a Philadelphia career consultant.

Since these women see themselves as management, however, a strong sense of pragmatism permeates their activism.

"Women's issues must always be seen as furthering the good of the corporation," says Elizabeth Pugh, a vice-president of First Boston Corp.

Few women managers expect their progress to be anything other than gradual. In a 1990 Korn/Ferry and UCLA survey of 4,000 senior executives, a majority estimated that women would occupy 16% of upper-management posts at the turn of the century. That's quite a jump from today's 3%—though a rather low, considering that by then half the work force will be female.

For further advances to occur, "Corporate America [must] get over its fears" of women in authority, says John P. McCotter, CEO of Continental Insurance Co., which actively promotes its female personnel. More women in the ranks will help. Management attacks on bias will help. Female executives uniting behind common causes will help. If this combination of demographics and enlightenment—plus a little legal pressure—coalesces, the '90s might be a breakout decade after all.

By Amanda Troy Segal in New York, with Wendy Zellner in Dallas and bureau reports

THROUGH THE GLASS CEILING

CHARLOTTE BEERS

Chairwoman, Ogilvy & Mather Worldwide



A CONSUMER IN CHARGE

David Ogilvy used to say: "The consumer is not a moron; she is your wife." Maybe the legendary adman

should update that aphorism: "The consumer is not a moron; she's running your ad agency."

On Apr. 9, Charlotte Beers became chairwoman and chief executive officer of Ogilvy & Mather Worldwide, the shop Ogilvy founded in 1948. Her appointment to one of America's preeminent advertising agencies easily makes Beers the most powerful woman on Madison Avenue. In fact, this 56-year-old Texan is on the way to becoming a legend in her own right.

Ad executives are still buzzing about Beers's highly public

job search, which began in February, when she resigned as CEO of Tatham RSCG, a midsize Chicago agency. Wooed by two of the world's biggest marketing conglomerates, Saatchi & Saatchi PLC and WPP Group PLC, she opted for WPP subsidiary Ogilvy, because of its lustrous creative heritage.

How did the leader of a solid but creatively unremarkable shop become the industry's most sought-after executive? Colleagues say Beers's reputation for handling clients is no secret: Billings at Tatham quadrupled in her 10 years as CEO, where she was a favorite of such marketers as Procter & Gamble Co. "Her great strength is in understanding the client's needs," says William B. Connell, a former P&G vice president who worked with Beers.

DRAMATIC FLAIR. That may be just what the nation's four largest agency needs. Ogilvy's reputation for client service has recently been tarnished. With painful losses, such as American Express Co.'s charge-card account, Ogilvy's revenues declined 5% in 1991, to \$785 million, on billings of \$5.4 billion.

Beers hates being referred to as a client handler. But she acknowledges that she has focused more on nuts-and-bolts marketing than on creative issues. At Baylor University, Beers majored in mathematics and physics. She began her career in 1960 as a brand manager at Uncle Ben's Inc., where she launched its long-grain and wild rice varieties. Beers's glamorous style and penchant for drama seemed tailor-made for advertising, and she moved to J. Walter Thompson Co. in 1968.

At JWT, she was one of the first female account managers assigned to Sears, Roebuck & Co. She impressed skeptical executives when, during a meeting, she nonchalantly dissembled a Sears power drill while explaining a new marketing plan. Beers thinks women such as herself have succeeded in advertising because the industry values expressiveness: "Advertising revolves around laughter and energy and wit," she says. "Women are comfortable with those things."

Laughter and wit are in short supply at Ogilvy these days, and Beers's first task is to bolster sagging morale. "She has to make people believe the agency is not dead in the water," says John Doig, a former Ogilvy executive. Her charismatic style should be a tonic. But unlike at Tatham, Beers has to inspire the troops in 281 offices across 58 countries. Just the kind of task that becomes a legend most.

By Mark Landler in New York
Profiles continue on page 100

small business, you want it all on one piece of paper.

ep it simple.

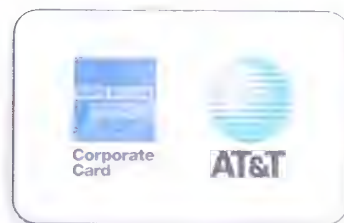


That's why AT&T and American Express announce a single Corporate Card program designed exclusively for small business.

One monthly billing statement from American Express that consolidates all your business expenses. A Quarterly Management Report that organizes all T&E and calling card charges by employee and category. And a 10% savings on your AT&T long distance card calls.

One card to carry. One bill to review.
It is that simple.

For more information, call 1 800 531-3934.



CORPORATELINKSM
FOR SMALL BUSINESS

JILL BARAD

President, Mattel USA



BARBIE IS HER BEST FRIEND

When Jill Elikann Barad went to work for Mattel Inc. in 1981, she had a great idea: selling a line of Barbie cosmetics. Instead, the 29-year-old junior executive was put in charge of A Bad Case of Worms, slimy rubber bugs that slink down walls. Alas, they were quickly squashed by the competition. Undaunted, Barad finally talked her way onto the Barbie team. And Barbie became her ticket to Mattel's boardroom.

Barad shrewdly reinvigorated the perennial but somewhat dated favorite of baby-boomer girls. She pioneered the idea of different "play patterns"—après-ski Barbie, Barbie on Rollerblades—and backed it up with a barrage of television advertising. Since 1987, Barbie sales have doubled, to \$840 million. That's half of Mattel's \$1.6 billion business overall. The average Barbie owner has seven dolls, decked out in everything from leather miniskirts to medical scrubs. Says Barad: "It's not just putting another little dress on another little doll—but how do you bring that doll to life?"

CUDDLY AMBIENCE. President of Mattel USA since 1990, Barad oversees the girls and activity toys division, which makes up the bulk of Mattel's business. She has also shown a knack for developing new lines—including a bathtub mermaid doll that "sings" underwater—that have become hits. Says Mattel CEO John W. Amerman: "Jill always comes through with the big idea."

With her office all a-fluff with stuffed puppy dogs, candy-like pillows, flowers, and, of course, Barbie dolls, Barad bubbles with enthusiasm. Despite the cuddly ambience, she drives her staff hard to get new toys to market. And not just her employees. As Barad hammered out a licensing deal for Aviva Sport Inc., which specializes in children's sports gear, she realized she was more familiar with dolls and cosmetics than bats and balls. So, she promptly hauled home some Aviva products for an expert assessment from her two young sons, Justin and Alex.

But Barbie remains Barad's greatest hit. And it hardly bothers her that her meteoric rise has been tied to selling the all-American bimbo doll that changes careers with every new outfit. Says Barad: "Barbie fulfills the fantasy of what it's going to be like to grow up. A doctor? A lawyer?" Or maybe CEO of a billion-dollar toy company...

By Eric Schine in Los Angeles

50 TOP WOMEN IN BUSINESS

ZOE E. BAIRD Sr. VP & General Counsel, Aetna (Sales: \$19.2 billion)
AGE: 39; EDUCATION: BA, JD U. Calif.-Berkeley; CAREER PATH: law; TENURE: NO. SUPERVISED: 100 A self-described "strategic activist," she's par major policy decisions at Aetna and is shaping the insurer's stand public issues such as health care.

JILL ELIKANN BARAD Pres., Mattel USA (Sales: \$1.6 billion)
AGE: 41; EDUCATION: BA, Queens College; CAREER PATH: sales; TENURE: 2 SUPERVISED: 1,090 She's known for always coming up with the new But biggest hit remains the good old Barbie doll, which, thanks to l expansion of the line, accounts for half of Mattel's sales.

MARY RUDIE BARNEBY Pres., Group Retire. Svcs., Equitable (Sales: \$6 bil AGE: 39; EDUCATION: BA, NYU; MBA, Fordham; CAREER PATH: marketing; 6 mos.; NO. SUPERVISED: 6 Recruited to start a 401(k) marketing divi Equitable—a business she has created to billion-dollar success twi before, at Merrill Lynch and Dreyfus.

BRENDA BARNES Pres., Pepsi-Cola South, PepsiCo (Sales: \$19 billion)
AGE: 38; EDUCATION: BA, Augustana; MBA, Loyola; CAREER PATH: market TENURE: 6 mos.; NO. SUPERVISED: 8,600 A PepsiCo lifetime employeee its highest-ranking female exec. Success at this new post means co Coca-Cola-loving Southerners that Pepsi's No. 1.

PATRICIA C. BARRON Pres., Office Document Products, Xerox (Sales: \$17 AGE: 49; EDUCATION: BA, Bedford College; MBA, Harvard; CAREER PATH: TENURE: 4 mos.; NO. SUPERVISED: 2,500 Her big break came when she open up China to the copier market in the early 1980s. Has just be head of \$8 billion division, the largest single unit at Xerox.

CAROL BARTZ CEO, Autodesk (Sales: \$285 million)
AGE: 43; EDUCATION: BS, U. Wis.; CAREER PATH: sales; TENURE: 1 mo.; NO SUPERVISED: 1,200 Hard-driving No. 2 executive of Sun Microsystems assumed the No. 1 spot at the world's fifth-largest software comp job: revive stagnant sales by getting its technology into new produ

CHARLOTTE L. BEERS CEO, Ogilvy & Mather (Sales: \$794 million)
AGE: 56; EDUCATION: BS, Baylor; CAREER PATH: marketing; TENURE: 1 mo SUPERVISED: 7,600 Recruited to Ogilvy, whose slipping sales and re need her charisma and bottom-line mentality. In a 10-year tenure at a Chicago ad agency, she quadrupled revenues, to \$324 million.

KAREN M. BOHN Ch. adm. off., Piper, Jaffray & Hopwood (Sales: \$64 mil AGE: 38; EDUCATION: BA, MA, U. N. D.; CAREER PATH: finance; TENURE: 4 SUPERVISED: 60 Key duty involves managing the ESOP of this larg employee-owned brokerage. Recently elected to the board of dire she also chairs the Greater Minneapolis Chamber of Commerce.

DIANA D. BROOKS Pres., Sotheby's, Sotheby's Holdings (Sales: \$378 mil AGE: 41; EDUCATION: BA, Yale; CAREER PATH: finance; TENURE: 2 yrs.; NO SUPERVISED: 450 Responsible for American operations, this banker overhauled the venerable auction house: "The business has gotten more technical. It would be hard for an art expert to be in this job d

ROXANNE J. DECYK VP, commercial & industrial sales, Amoco Oil (Sales: 6 AGE: 39; EDUCATION: BA, U. Ill.; JD, Marquette; CAREER PATH: distributio TENURE: 1 yr.; NO. SUPERVISED: 135 Recruited from Navistar, where she sha phoenix-like rise from International Harvester's ashes. "Corporat have the obligation to accomplish as much as we can."

LINNET F. DEILY CEO, First Interstate Bank of Texas (Sales: \$5.5 billion)
AGE: 46; EDUCATION: BA, MA, U. Texas; CAREER PATH: finance; TENURE: SUPERVISED: 3,200 Under her leadership, the bank went from a net net profit in 2 yrs.—one of the few in Texas to get turned around at the federal government's help.

NANCY DONOVAN Pres., Consumer Financial Corp., Sears (Sales: \$57 bil AGE: 40; EDUCATION: BA, Georgetown; MBA, Columbia; CAREER PATH: TENURE: 3 yrs.; NO. SUPERVISED: 353 Known for her launch of the Di card, she's now making Sears' consumer-financing division profit again, changing focus from car loans to home-equity lines of credi

on: Identify women with clout in their companies, industries, and the business community at large. The Chief executives, business associations, recruiters, professional organizations. The results: Look below

FORINA VP, Strategy & Market Dev., AT&T (Sales: \$63.1 billion)
EDUCATION: BA, Stanford; MBA, U. Md.; CAREER PATH: sales; TENURE: 1
SUPERVISED: 1,500 Her job includes the often-delicate task of selling
equipment to foreign phone companies. Testified before Congress
on rescinding export barriers to former East bloc markets.

DSTAD VP & Genl. Mgr., Multimedia, IBM (Sales: \$64 billion)
EDUCATION: BA, U. Calif.-Santa Clara; MA, UCLA; CAREER PATH: tech.;
SUPERVISED: NO. SUPERVISED: 1,000 One of three female officers at Big
Blue is synonymous with improving quality; current mission is
to enter the entertainment field by developing multimedia software.

ZARELLI Managing dir., Shearson Lehman Bros. (Sales: \$11.2 billion)
EDUCATION: BA, MA, PhD, Drexel; CAREER PATH: economics; TENURE: 5
SUPERVISED: 5 When she predicts, America listens. First claim to
fame forecasting the stock market crash of 1987; more recently, got
to equities just ahead of the bull market last year.

RDON Pres., Tootsie Roll Indust. (Sales: \$208 million)
EDUCATION: BA, Brandeis; CAREER PATH: production; TENURE: 16 yrs.; NO.
SUPERVISED: 1,400 The candy maker has enjoyed record annual sales since
entering the business. Ongoing challenges: keep the plant state-of-
the-art; get a larger Tootsie Roll in the middle of the Tootsie Roll Pop.

N Exec. VP, Disney Studios, Walt Disney (Sales: \$6.6 billion)
EDUCATION: BA, Cornell; JD, Loyola; CAREER PATH: law; TENURE: 3 yrs.;
SUPERVISED: 100 As Disney production's top lawyer, this tough
operator of film deals and financing packages plays a key role in keeping
production costs so low.

M. HAPKA VP, Advanced Commun. Svcs., US West (Sales: \$10.6 billion)
EDUCATION: BS, U. Minn.; MBA, U. Chicago; CAREER PATH: marketing;
SUPERVISED: NO. SUPERVISED: 75 She helped restructure Control Data Corp.
into a profitable operation. US West hired her away to build its new,
high-quality communications network.

RRIS VP, corporate development, Bausch & Lomb (Sales: \$1.5 billion)
EDUCATION: BA, Catholic; MS, Rensselaer Polytechnic; CAREER PATH:
TENURE: 9 yrs.; NO. SUPERVISED: 16 More than half of company's
growth in the last decade has come from mergers and acquisitions
executed 146 (\$650 million worth) of them.

NCOCK VP & Genl. Mgr., Networking Systems, IBM (Sales: \$64 billion)
EDUCATION: BA, College of New Rochelle; MA, Fordham; CAREER PATH:
TENURE: 4 yrs.; NO. SUPERVISED: 10,000 The highest-ranking
woman at IBM, she has to find a way to revamp company's entrenched but
outdated networking products to fend off nimbler competitors.

OPER Pres., alternate site international, Baxter Intl. (Sales: \$8.9 billion)
EDUCATION: BA, U. Penn; MBA, U. Chicago; CAREER PATH: corp. finance;
SUPERVISED: NO. SUPERVISED: 50 Scored a coup by streamlining operations
of any Canadian subsidiary—while increasing annual sales 8%.
Working to build foreign markets for home health care services.

ORRN CEO, Bank One, Cleveland Banc One (Sales: \$4 billion)
EDUCATION: BA, Pomona College; PhD, Johns Hopkins; CAREER PATH:
TENURE: 5 yrs.; NO. SUPERVISED: 1,400 Under her command, earnings
of the bank, northeastern Ohio bank increased 32% and assets have
been topping \$2 billion.

TT HOUSE VP, Intl., Dow Jones (Sales: \$1.7 billion)
EDUCATION: BA, U. Tex.; CAREER PATH: journalism; TENURE: 3 yrs.; NO.
SUPERVISED: 421 A foreign correspondent turned publisher of foreign
editions—including the European and Asian editions of *The Wall Street*
Journal—she began expanding Dow Jones's news service abroad.

A. HUDSON VP, imaging group, Eastman Kodak (Sales: \$19 billion)
EDUCATION: BS, Ind. U.; CAREER PATH: management; TENURE: 7 mos.; NO.
SUPERVISED: 2,500 Has just landed her first job at a major operating unit—
the camera and film group. As head of computer services, she
is expected to save Kodak \$1 billion this decade.

LINDA WACHNER

Chief Executive, Warnaco



SHE HAD TO BE AN OWNER

She's not your typical CEO. She often answers her own phone. She keeps a small greenhouse stocked with orchids in her office. And she is the only woman to head a public company that she neither inherited nor founded but won in a bitter takeover battle.

Linda J. Wachner had spent five years as president and CEO of Max Factor & Co. But managing a corporation wasn't enough—she wanted to own one. In 1985, she and Andrew G. Galef, a California investor who specializes in apparel companies, made a hostile bid for Warnaco Inc. By April, 1986, Wachner had won the lingerie maker and taken it private in a \$486 million LBO. Last year, she took it public again.

TOUGH BOSS. Under Wachner, Warnaco's sales grew from \$427 million in 1987 to \$563 million in 1991. It now owns the licenses for products that range from Valentino-designed nighties to Fruit of the Loom cotton undies. Warnaco also claims 30% of the brassiere market, with brands such as Warner's. Says Wachner: "I want to make Warner's the Coca-Cola of the bra business."

That sort of determination has earned her a reputation as a tough boss who doesn't brook dissent. "Quite frankly, a lot of people complained that Linda was very, very difficult to work for," says Joel Orenstein, Bloomingdale's vice-president and former president of Warnaco's defunct women's division. The hard-as-nails image wouldn't be noticed if she were a man, but Wachner brushes aside the specter of a sexual double standard. "Do I think there are jealousies out there in the world and people who aren't satisfied? Sure," she says. "But it's not against women. If I thought that way, it would slow me down." True to form, Wachner would rather discuss income than women's issues. In 1991, she earned \$3 million, which makes her one of the best-paid women executives in the U.S.

Meanwhile, she's having a good time. On a winter day, the 46-year-old widow skips her couture suits and shows up in a red wool sweater and matching leggings, blue ankle boots, and big crystal earrings. A photo in her office shows her house in Aspen, where she "skis remedially" and socializes with billionaire Marvin Davis. But usually Wachner is in the office. "Everybody says: 'What are you going to do next?' But as long as I own a percentage of the company, this is where I'll be."

By Laura Zuckerman, New York

MICHELE HOOPER

President, Alternate Site Int'l., Baxter Int'l.



MAPPING OUT HOME CARE

Not long after arriving in Toronto, Michele J. Hooper—the new head of Baxter International Inc.'s Canadian unit—was invited to join the Young President's Organization. During her welcome dinner, a member of this predominantly white, male club joked that it was good Hooper was a woman and even better that she was black—but it would have been best of all if she were disabled, too. Tense silence. Then, Hooper “just laughed it off,” recalls Bruce R. Ingram, the club's chairman. “She put everyone at ease.”

Naturally, Hooper has had plenty of experience dealing with the loaded issues of race and gender. Colleagues voiced doubts about her promotion in 1988: The company's largest international division, a \$300 million, 1,500-employee operation, was going to a person with little line-management experience. “One of the first questions I got was whether I was making the decisions or whether someone else was,” Hooper recalls. “The answer was that I made them.”

According to Baxter, a hospital-supply company, Hooper boosted the unit's net operating margins by 4 percentage points. Her next step might have been to run a large U.S. division. Instead, she took on a trickier assignment: president of the alternate-site international unit, which includes overseas operations for Caremark, Baxter's fast-growing home health care subsidiary. Her job is to build a tiny \$25 million business into a full-fledged European operation. That means creating a market in countries that still handle such care in hospitals.

A RISK-TAKER. Hooper's boss, Caremark CEO Charles H. Blanchard, recognizes that “starting a new business is a risky thing. But then, she's a risk-taker.” A coal miner's daughter from hard-scrabble Uniontown, Pa., she was the first in her family to go to college. In 1976, she joined Baxter as a senior financial analyst and rose through a series of corporate finance jobs. Heading the Canadian unit taught her “that I can handle more stress and uncertainty than I originally thought.”

In her new job, she'll have plenty of both. A grueling schedule takes her to Amsterdam one week and Mexico City the next. Her husband, Lemuel Seabrook III, has transferred from Harris Bankcorp to the Bank of Montreal and back to Harris to accommodate Hooper's moves. For this power couple, love means keeping your suitcases packed.

By Julia Flynn in Chicago

LOIS JULIBER Chief Technological Officer, Colgate-Palmolive (Sales: \$6.6 billion)
AGE: 43; EDUCATION: BA, Wellesley; MBA, Harvard; CAREER PATH: product development; TENURE: 6 mos.; NO. SUPERVISED: 1,000 Head of Far East/Canada operations. She got Colgate toothpaste into China. Strong performance has just won her a new post, overseeing research and development of new products.

ANN KAPLAN General Partner, Goldman Sachs (Sales: \$7.9 billion)
AGE: 44; EDUCATION: BA, Smith; MBA, Columbia; CAREER PATH: finance; TENURE: 10 yrs.; NO. SUPERVISED: 34 Known for her innovative work with city officials on low-income housing projects: “Public finance is a perfect combination of my interests in government and finance.”

SALLY FRAME KASACKS CEO, Ann Taylor Stores (Sales: \$438 million)
AGE: 47; EDUCATION: BA, George Washington; CAREER PATH: retail; TENURE: 10 mos.; NO. SUPERVISED: 3,000 New CEO has a big mission: win back customers to the troubled clothing chain. No stranger to turnarounds, having led the last three years doubling sales at Abercrombie & Fitch.

KAY KOPLOVITZ CEO, USA Network (Sales: \$400 million)
AGE: 46; EDUCATION: BA, U. Wis.; MA, Mich. St.; CAREER PATH: broadcasting; TENURE: 12 yrs.; NO. SUPERVISED: 270 Cable-TV pioneer whose network is in virtually every cable system in America and is one of the top five in revenues.

SANDRA KURTZIG CEO, ASK Computer Systems (Sales: \$344 million)
AGE: 45; EDUCATION: BS, UCLA; MS, Stanford; CAREER PATH: tech.; TENURE: 10 yrs.; NO. SUPERVISED: 2,000 She sighs, “My job is not to be a role model, but she nevertheless is, creating one of the top 10 software companies by retiring early, then dramatically returning when its fortunes sagged.”

JOAN LAPPIN Pres., Gramercy Capital Mgmt. (Sales: \$253 million)
AGE: 48; EDUCATION: BA, U. Wis.; MBA, NYU; CAREER PATH: finance; TENURE: 10 yrs.; NO. SUPERVISED: 5 The strategies of this analyst-turned-investor manager are risky, but with a total return of 44% annually in the last five years, her corporate clients aren't complaining.

JUDY C. LEWENT Chief Financial Officer, Merck (Sales: \$8.6 billion)
AGE: 43; EDUCATION: BA, Goucher College; MBA, MIT; CAREER PATH: financial; TENURE: 2 yrs.; NO. SUPERVISED: 500 Hailed by colleagues as one of the most innovative financial execs around, she's instrumental in building Merck's joint ventures with other health care companies.

AUDREY MACLEAN CEO, Adaptive, NET (Sales: \$100 million)
AGE: 40; EDUCATION: BS, U. Calif.-Redlands; CAREER PATH: tech.; TENURE: 10 yrs.; NO. SUPERVISED: 116 A true entrepreneur: Six years after co-founding she started Adaptive, an independent subsidiary focusing on leading-edge network technologies.

ELLEN R. MARRAM Pres., Nabisco Biscuit, RJR Nabisco (Sales: \$14.9 billion)
AGE: 45; EDUCATION: BA, Wellesley; MBA, Harvard; CAREER PATH: marketing; TENURE: 4 yrs.; NO. SUPERVISED: 18,000 As head of Nabisco's core business, she has increased its compounded earnings 20% annually for the last five years.

ANNE H. McNAMARA Sr. VP—admin. & genl. counsel, AMR (Sales: \$12 billion)
AGE: 44; EDUCATION: BA, Vassar; JD, Cornell; CAREER PATH: law; TENURE: 10 yrs.; NO. SUPERVISED: 600 Overseeing legal and personnel affairs, she helped establish American Airlines' innovative management training program designed to ensure women and minorities get equal consideration.

NANCY S. NEWCOMB Sr. Corp. Officer, Citicorp (Sales: \$31.8 billion)
AGE: 47; EDUCATION: BA, Conn. College; MA, Boston; CAREER PATH: corporate; TENURE: 4 yrs.; NO. SUPERVISED: 60 She oversees Citibank's acquisition of deposits (\$145 billion worth); is in the thick of the bank's efforts to build new capital.

LIZ POWELL Director, Design Center, Sony USA (Sales: \$25.7 billion)
AGE: 37; EDUCATION: BA, Arizona State; CAREER PATH: graphics design; TENURE: 10 yrs.; NO. SUPERVISED: 12 Both the first woman and the first American to head graphics and industrial design for the Japanese giant. Newest product bearing her stamp: a 53-inch TV.

CAROLE A. PRESLEY Sr. VP, marketing, Federal Express (Sales: \$7.5 billion)
AGE: 43; EDUCATION: BA, Eastern Ky.; CAREER PATH: marketing; TENURE: 10 yrs.; NO. SUPERVISED: 228 FedEx's chief marketer, now trying to stem hemorrhaging from European operations and to wage the price wars with other express mail carriers.

HE VP, sr. officer-marketing, Avon Products (Sales: \$3.5 billion)
EDUCATION: BA, Dillard; MBA, Columbia; **CAREER PATH:** marketing;
rs.; NO. **SUPERVISED:** 155 Runs \$1.4 billion department that
 and markets cosmetics, skin-care, and perfume lines, including
 e, the second best-selling fragrance of 1990.

KOFF Sr. VP, devel. info. svcs., Lotus Development (Sales: \$829 million)
EDUCATION: BS, SUNY-Albany; **CAREER PATH:** tech.; **TENURE:** 1 yr.; **NO.**
rs.; 40 Promoted after helping salvage the company's troubled
 et program, this entrepreneurial exec now spearheads Lotus'
 rtments.

RUNTAGH Pres., Info. Svcs., General Electric (Sales: \$59.3 billion)
EDUCATION: BA, Penn. State; **CAREER PATH:** production; **TENURE:** 3 yrs.;
SUPERVISED: 2,500 A company lifer who oversees GE Capital's Decimus,
 the computer leasing unit that grosses \$600 million in annual

ANY Chmn., 20th Television, 20th Century Fox (Sales: \$880 million)
EDUCATION: Kent State; **CAREER PATH:** broadcasting; **TENURE:** 1 yr.; **NO.**
rs.; 221 She's the highest-ranking woman studio exec in
 l; known for budget-slashing measures and production coups—
 recent deal for a talk show starring Chevy Chase.

SANDLER Co-CEO, Golden West Financial (Sales: \$2.2 billion)
EDUCATION: BA, Wellesley; MBA, NYU; **CAREER PATH:** finance; **TENURE:** 12
SUPERVISED: 3,700 Founded this savings and loan with her husband,
 conservative management has paid off: It's the nation's third-
 ift, with earnings up 31% in 1991.

T. MARK Pres., Logistic Sys., Pitney Bowes (Sales: \$3.3 billion)
EDUCATION: BA, Rutgers; MBA, Pace; **CAREER PATH:** mgmt. planning;
rs.; NO. **SUPERVISED:** 6,000 Supervises three divisions, generating
 n in sales, including a mailroom-management service that she
 in 1985.

W Pres., COO, Alza (Sales: \$140 million)
EDUCATION: BS, PhD, Birmingham; **CAREER PATH:** sci. research; **TENURE:** 4
SUPERVISED: 800 A biologist turned biotech exec, she runs an
 firm whose key products include transdermal patches that
 dication.

RO Exec. VP, corp. affairs, American Express (Sales: \$25.7 billion)
EDUCATION: BA, U. Wis.; MA, PhD, Columbia; **CAREER PATH:** mgmt./
TENURE: 1 yr.; **NO. SUPERVISED:** 91 An authority on international
 at Columbia, she has used her understanding of foreign markets
 ix cards in Japan.

IVAK Exec. VP & Creative Dir., Young & Rubicam (Sales: \$980 million)
EDUCATION: NY School of Visual Arts; **CAREER PATH:** copywriting; **TENURE:**
SUPERVISED: 150 Known for creating wittily offbeat ads, she has
 Goliath task: to rejuvenate this white-shoe agency's somewhat
 itive reputation.

TH Pres., Stein & Co. (Assets: \$2.1 billion)
EDUCATION: BA, Loyola; MA, U. Ill.; **CAREER PATH:** real estate; **TENURE:** 1
SUPERVISED: 100 As president of this real estate giant, she pushes
 to hire women—a stance that has helped her company win
 n in high-profile projects over the past two years.

CHNER CEO, Warnaco (Sales: \$563 million)
EDUCATION: BA, SUNY-Buffalo; **CAREER PATH:** retail; **TENURE:** 6 yrs.; **NO.**
rs.; 11,800 One of the few female CEOs to run a company she didn't
 ne of the few CEOs to take her company private, then public
 1991 offering was so popular it oversold by 40 million shares.

WOODS VP & Pr'c'pal Envir. Officer, Adolph Coors (Sales: \$1.9 billion)
EDUCATION: BA, MA, U. Colo.; **CAREER PATH:** real estate; **TENURE:** 11 yrs.;
SUPERVISED: 30 Coors' first woman vice-president, she also heads a
 commerce-related business development group: "I may wield
 nce in my community than in my own company."

JNG VP, consumer market dev., General Motors (Sales: \$123 billion)
EDUCATION: BA, Wellesley; **CAREER PATH:** advertising; **TENURE:** 4 yrs.; **NO.**
rs.; 1 In charge of a \$40 million ad campaign, this Madison Avenue
 blicizing GM's new concern for quality with ads that emphasize
 eatures instead of image and lifestyle.

JOAN LAPPIN

President, Gramercy Capital Management



VERY FANCY RETURNS

Joan Lappin vividly remembers her introduction to the men's-club world of Wall Street. The year was 1967, and in her first job as an analyst at Equity Research Corp. she had to attend a meeting at the New York Stock Exchange. At that time, no women were allowed in the Big Board's lunch club, located on the same floor as the conference room. So, security guards wouldn't let Lappin in on that floor. She then took the service elevator with a couple of janitors to avoid being seen by the lunching brokers. No wonder Lappin now gets a kick out of declining lunch invitations at the Big Board.

Not that the president of Gramercy Capital Management Corp. defines power solely in such terms. Mainly, Lappin sees it as making money for clients. And that she does. In the six years since she founded Gramercy, Lappin has chalked up a compounded annual total return of 44.1%, far outpacing the 15.8% gain in the Standard & Poor's 500-stock index. Gramercy's assets under management have ballooned from less than \$1 million in 1986 to \$253 million at yearend, 1991. The clientele includes Bankers Trust, Safeway, and Gannett. Gannett CEO John J. Curley was so impressed with Lappin that he gave her some of his own money to manage.

CLOSE TRACKING. Gramercy's method is to invest heavily in stocks that Lappin believes are grossly undervalued—primarily medium-capitalization issues. Gramercy portfolios typically own only 15 to 20 different stocks, vs. 50 to 100 in other portfolios at firms of equal size. Crucial to the strategy is microscopic monitoring of each stock and a long-term outlook. "The quarterly performance derby that the Street is caught in is a loser's game," Lappin says.

It's a risky approach, but clients such as Knight-Ridder Inc. aren't complaining: "Joan is one of the most cunning, intuitive, and shrewdest investment pros on Wall Street," says CEO James K. Batten, a fan of Lappin's from her days as a media securities analyst. Lappin spent 13 years analyzing stocks before switching to portfolio management at Manufacturers Hanover Trust Co. in 1983. Joining Manny Hanny was a sort of vindication. Back in 1965, she had been fired as a secretary there. Sensing that she was bored by the job, her boss advised her: Don't work as a secretary ever again. For Joan Lappin, that's turned out to be a pretty good tip.

By Gene G. Marcial in New York

Why are so many Lotus 1-2-3 users switching to Microsoft Excel?





Why? Because they've discovered that new Microsoft Excel 4.0 for Windows™ is the ultimate refinement of a powerful, easy-to-use spreadsheet.

Use it, and you too could be getting your routine spread-

sheet tasks (not to mention more amazing number-crunching feats) done faster. And more easily.

We're talking about one-stop just-about-everything. For example, Autosum™ instantly sums rows or columns of numbers with just a click of your mouse.

Or take Auto-Format: it lets you apply one of 14 professionally designed formats to your worksheet with another click of your mouse.

They're both on a customizable Toolbar, which also has helpful things like a Spelling Checker and instant charting.

And then there are learning tools like Wizards, which are step-by-step guides of various features.

And Scenario Manager, an analysis tool that lets

you easily create and save multiple "what if" scenarios, then instantly produce nice-looking summary reports.

And a lot more – far too much to cover here. In short, spreadsheet tasks, both routine and complex, are easier than you ever thought possible.

"Okay," you say, "but how easy is it to switch?"

Well, consider this: Microsoft Excel lets you learn using what you already know. With Help for Lotus® 1-2-3® users, you can type in your familiar 1-2-3 commands,

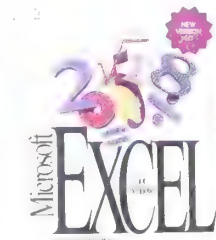
and Microsoft Excel shows you the corresponding command. (Which, by the way, is something you won't see in any other spreadsheet for Windows.)

Microsoft Excel also reads and writes all your 1-2-3 files, and runs your macros – unmodified. So your investment with Lotus is safe.

Finally, if you're using Lotus 1-2-3 or Borland Quattro® Pro, you can switch to Microsoft Excel 4.0 for Windows for \$129*. There's even a 90-day money-back guarantee.**

But see all this for yourself. Ask for a demo of Microsoft Excel 4.0 for Windows at your local software reseller. Or call us at (800) 323-3577, Dept. HB3, to find out more or to order your copy.

And join the multitude of 1-2-3 users who've moved to the best spreadsheet made for Windows: new Microsoft Excel 4.0.



The spreadsheet for Windows.

Microsoft
Making it easier

Using your 1-2-3 files, your own macros and familiar commands in Microsoft Excel 4.0 for Windows is no problem.

*Already using Microsoft Excel, the upgrade is \$99. Offer good through 7/31/92. **See your reseller for details. Offer good only in the 48 United States. For information only. In Canada call (800) 323-3577. © 1992 Microsoft Corporation. All rights reserved. Printed in the USA. Microsoft is a registered trademark and Autosum and Windows are trademarks of Microsoft Corporation. Lotus and 1-2-3 are registered trademarks of Lotus Development Corporation. Borland and Quattro are registered trademarks of Borland International, Inc.

WHO'LL GET THE LION'S SHARE OF WEALTH IN THE '90s? THE LIONS

Economic forces—not political ones—are responsible for the still widening income gap in the U.S.

From 1977 to 1989, the U.S. economy grew at a rate that would have lifted everybody's real income by 10% if the gains had been distributed evenly. Instead, the top 1% of families—about 1 million in 1989—saw their average incomes soar by 80%, while the living standards of most other Americans stagnated or even fell.

With the Presidential campaign heating up, this lopsided distribution of gains has become a political football. Democrats are blaming the Reagan Administration's economic policies, while Republicans are attacking the data as unreliable. But both sides are wide of the mark. The numbers tell the same story no matter how they are sliced. A widening income gap started long before the Republicans took office and was caused by fundamental changes in the economy. Says Paul R. Krugman, a prominent economist at Massachusetts Institute of Technology: "At base, it can't be Ronald Reagan's fault."

HIGHER FEES. A BUSINESS WEEK analysis of the data shows that the rising prosperity of the top 1%, those families in 1989 with incomes over \$165,000, can be traced to four critical factors. Doctors and lawyers, who make up a big chunk of the top 1%, were able to raise fees far faster than inflation. Top performers in many fields, from management to Wall Street, saw their compensation soar as U.S. business went global. Wealthy households with money to invest benefited from high real interest rates, which were boosted by the borrowing binge of the 1980s. And booming stock and real estate markets produced big capital gains for investors.

The analysis indicates that these four factors account



for an extraordinary 70% of the \$200 billion increase in the annual income of the top 1% between 1977 and 1989, after adjusting for inflation and population growth (table). What's more, with the exception of real estate gains, the forces that produced the inequality of the 1980s are likely to persist in the 1990s.

Consider the earnings gains for doctors and lawyers, which alone account for a staggering \$35 billion of the total \$200 billion gain (table, page 88). Between 1983 and 1990, the average income of lawyers, after inflation, rose by 25%, while doctors' earnings increased by 21%. By comparison, the salaries of engineers rose by only 4% over the same period.

Moreover, the 1990 should be little different. Even though the U.S. government and companies are vigorously trying to contain health and legal costs, doctors and lawyers still have the advantage of a near-monopoly of medical and legal services. Doctors in particular will benefit from an aging population that will keep medical spending, and physicians' incomes, rising. Even during the past year, while the real incomes of other professionals were flat, the real median earning of doctors rose by 7%.

But doctors and lawyers were not the only winners

Across a wide range of professions the gap between the top achiever and everyone else has been widening. Take the senior managers of large companies for example. From 1980 to 1991, chief executives' compensation soared by 138% after inflation. Meanwhile, real salaries for all managers rose by just 5%. Notes compensation consultant Graef & Crystal: "Incentive plans are always disproportionately slanted in favor of the top brass."

BOOK CONTRACTS. On Wall Street, top traders and investment bankers put down the bulk of the bonuses. Even among journalists and academics, lucrative book and consulting contracts have produced a small number of big winners.

Indeed, it has become the norm to pay extremely high compensation to a select group of top performers (table). Partners at major law firms garner 10% of all income going to lawyers, even though they are less than 2% of the profession.

This superstar effect only going to get more important as globalization raises the stakes for U.S. businesses. A successful corporation now has access to markets all over the

Profession	Number	Average earnings ('91)
MANAGEMENT CONSULTANTS	1,200	\$1,100,000
INVESTMENT BANKERS	1,000	666,000
ATTORNEYS	1,500	627,000
PHYSICIANS	13,000	445,000
ENGINEERS	400,000	170,000

FOR EVERY YOU, THERE'S A FUJITSU.

Portable communication.

Whether you're

entertaining a prospect

or riding the range,

the ability to stay in

touch wherever you go

is an essential ingredient

of success. And no

pocket cellular

phone says success

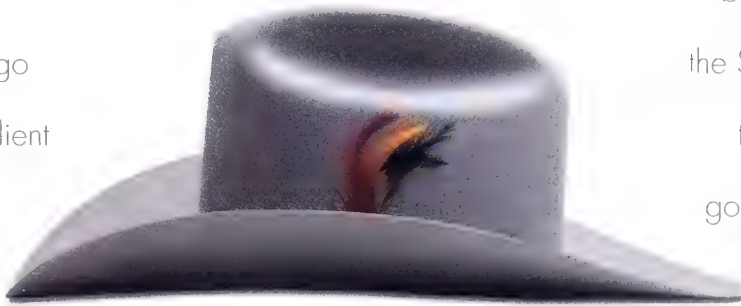
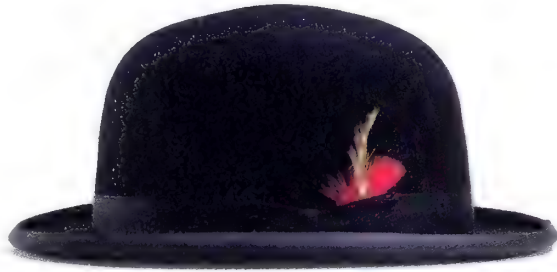
more clearly than the

Pocket Commander

Stylus™ from Fujitsu.

Accessories such as

the hands-free car kit,



3-watt power booster,

cigarette lighter

adapter and Power

Pack Plus alkaline

battery pack, give

the Stylus practicality

to match its sleek

good looks. For the

portable phone

that keeps up with

you no matter what

hat you're wearing,

look to Fujitsu.

For every you,

there's a Fujitsu.

1 - 8 0 0 - 9 5 5 - 9 9 2 6

FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

Pocket Commander Stylus™ is a trademark of Fujitsu Network Transmission Systems, Inc.

world. At the same time, the increasing number of foreign competitors leave less room for mistakes, says Ira Kay, managing director at Hay Group Inc., a compensation consultant. The combination means that companies and clients are more willing to pay for top-notch talent. Moreover, improvements in communications, such as fax machines, are making it easier for a small group of top people to serve a wide market.

WITH INTEREST. It's not just high skills that produced the big income gains. The debt explosion of the last decade helped generate a staggering \$50 billion increase in the interest and dividend income going to the top 1% of families. As the government, business, and consumers took on mountains of debt, interest income to individuals more than doubled

HOW THE RICH GOT RICHER

In 1977, the top 1% of families earned 8.7% of all pretax income. By 1989, their share had risen to 13% of all income, an eye-popping \$200 billion increase. Here's how that additional \$200 billion was earned:

Increase in income received
by top 1% of families, 1977-89
Billions of 1989 dollars

INVESTMENT INCOME	
INTEREST AND DIVIDENDS	\$50
CAPITAL GAINS	45
SALARIES AND SELF-EMPLOYMENT INCOME	
DOCTORS	20
LAWYERS	15
SENIOR MANAGERS	5
INVESTMENT BANKERS AND OTHER WALL STREET EMPLOYEES	5
PROFESSIONAL ATHLETES	1
ALL OTHERS, INCLUDING SMALL-BUSINESS OWNERS AND TWO-EARNER FAMILIES	59

AIA, CONGRESSIONAL BUDGET OFFICE
CENSUS BUREAU, BW ESTIMATES

from 1977 to 1989, adjusted for inflation, rising far faster than wage and salary income. And a hefty portion of those interest payments went to the top 1% of families, who held about 77% of all bonds in 1989, according to a recent paper from the Federal Reserve. And as long as the federal deficit keeps climbing, real interest rates will stay high; so will interest income.

To be sure, the boom in the real estate and stock markets, which helped add \$45 billion in capital gains to the income of the top 1%, may not be repeated again soon. But even so, the other factors will ensure that the income gap will continue to widen in the 1990s. And that's going to be true no matter who wins the Presidential election—Bush, Clinton, or Perot.

By Michael J. Mandel in New York

The Corporation

STRATEGIES

CAN HILTON DRAW A FULL HOUSE?

It's gambling on casinos—and hoping they'll prop up weak hotel

Barron Hilton, the normally dour chairman of Hilton Hotels Corp., chuckles as he tells the story. Back in 1946, Las Vegas developer Del Webb, a family friend, was building the Flamingo casino for mobster Bugsy Siegel. When funds ran low, Webb called a meeting to raise more cash from Siegel's shady associates. "This guy from Chicago tells Del he can have some money in three months," Hilton recalls. But "when the cash arrived in just 30 days, Del knew right then that casinos were going to be a great cash-flow business."

No kidding. Ever since the late 1970s, when Atlantic City opened for gambling and the fortunes of Las Vegas revived, Wall Street has been drawn to cash-generating companies such as Circus Circus Enterprises Inc. and Mirage Resorts Inc. Yet Hilton, a player in Vegas since 1971, has missed out on much of the excitement. Better known for its ponderous hotel operations than for its glitz, Hilton saw its stock languish below its appraised breakup value for much of the 1980s.

GAME PLAN. But now, Hilton is finally going all out for gaming. Already owner of four casinos in Nevada, the Los Angeles hotelier lately has been popping up anywhere a casino might be built. It is pushing huge projects in New Orleans and Chicago. It intends to take its blackjack tables to such countries as Egypt, Turkey, and Uruguay, and on May 25 it was cleared to build a \$265 million casino in Brisbane, Australia. "We will work very closely with any state or city that wishes to explore the benefits gaming can bring," says Hilton, the 64-year-old son of founder Conrad Hilton.

The company realized back in 1989 that it had better snap out of its sluggish ways. Early that year, it rejected separate bids by Chicago's JMB Realty Corp. and Los Angeles financiers, Checchi and Gary Wilson, majority owners of Northwest Airlines Inc.'s parent company. By that time, Hilton's stock had zoomed to 115 on the takeover rumors, only to fall to 52 when the bid took Hilton off the block. "We spent months thinking about the offers," says

John V. Giovenco, Hilton's executive vice-president and head of its U.S. casino operations. "When it was over, we had to sit back and say to ourselves, 'What are we going to do with the company now?'" The result: Hilton decided to let Giovenco, 55, put a big wager on gambling.

It's not hard to see why. Last year, the company's earnings fell 38% to \$84.3 million, on \$1.1 billion in revenues. While gaming accounts for 34% of Hilton's overall sales, the four casinos contributed nearly two-thirds of Hilton's \$184.8 million in operating earnings. Its biggest winner is the very same Flamingo casino on the Vegas Strip that Hilton built for Bugsy Siegel. Purchased by Hilton in 1971, the Flamingo alone generated roughly one-third of 1991's operating profit.

As it gets set to expand, Hilton has the support of a sturdy balance sheet. It has borrowed relatively little money in the 1980s. Debt now represents 24% of overall capital, in contrast to hotel competitors such as Marriott Corp., with 80%. The company also generates an enviable cash flow—some \$223.6 million last year alone. So all in all, Hilton has plenty of room to borrow more.



A BETTER BET FOR HILTON



ill, like most wagers, Hilton's new basis on gambling carries a large element of risk. Competition for the gaming dollar is fast and furious, and stakes are high. Hilton has had to pour more than \$156 million into renovating the Las Vegas Hilton over the past five years to keep up with glittering new rivals such as Stephen A. Wynn's Mirage and Circus Circus' Excalibur. Hilton has just announced a \$100-million renovation of the Flamingo to keep pace with three new casinos opening in the next couple of years, including a theme park connected to Kirk Kerkorian's sprawling MGM Resorts Inc. casino.

Even that may not be enough. Since the occupancy at Hilton's casinos has slipped slightly, despite cuts in room rates in both years. To lure high rollers from other casinos, the Las Vegas Hilton has had to be more generous in extending credit—a policy that forced it to swallow \$25.7 million in bad gaming debts last year. Those losses reduced 13% off operating income from 1991.

But that hasn't slowed Giovenco. "We're gaming as a growth business, for us it's the rest of the industry," he says. A former accountant who joined Hilton's casino unit in 1972, Giovenco's only move with glitz came in the early 1980s, when he signed up-and-coming Mike Tyson to an exclusive contract to fight all fights at the Las Vegas Hilton.

LOUISIANA PURCHASE? Giovenco kicked off Hilton's latest gambling push last year in Atlantic City. In 1985, New Jersey casino regulators had denied Hilton a gaming permit, arguing that it had failed to demonstrate "good character and integrity" by retaining an outside lawyer with alleged ties to organized crime. The lawyer no longer works for Hilton, and last year Giovenco won the regulators' approval.

Giovenco promptly offered \$165 million to buy Donald Trump's struggling Atlantic City Castle casino, which Hilton had offered Trump for \$320 million after it had been denied a license. Trump rejected the offer, but Hilton may consider another bid for the 634-room casino and is now looking elsewhere in Atlantic City. "If they get a cheap deal, I'll rush for it," says Al Winkler, publisher of *Atlantic City Action*, a newsletter that tracks the gaming business.

Recently, Hilton has stepped up the pace. In 1991, it began work on a \$100-million, 3,000-passenger floating casino on the Mississippi River, where riverboats are autho-



rized to operate under a 1991 Louisiana state law. Giovenco has also told Louisiana officials that Hilton would spend up to \$400 million to build a huge casino along with the riverboat. In Reno, it has offered \$79 million for Bally Mfg. Corp.'s 2,000-room hotel and 100,000-square-foot casino, the city's largest. But by far Hilton's biggest project would be the \$2 billion casino and high-tech theme park that it, along with Caesars World Inc. and Circus Circus, has proposed building in Chicago.

The planned American projects would not only generate strong cash flow but also help fill rooms at some of Hilton's underused properties. Hilton's bets on U.S. gambling expansion could yet come up snake eyes, though. In New Orleans, Hilton faces heavy competition from hotel entrepreneur Christopher Hemminger for the single casino that Louisiana legislators are likely to grant. And in Chicago, despite the 45,000 new jobs that the gaming complex promises to create, the project is strongly opposed by powerful horse-racing interests that seem to have the ear of Governor Jim Edgar.

Hilton's gambling thrust has already

had one desired effect: Wall Street is taking notice. After years of tracking Hilton as a hotel company, many analysts are reluctantly admitting that Hilton is starting to look more like a gaming stock—where multiples are as much as 30% higher. At around 48, the stock has been trading near its 52-week high. "The Street perception was always that this was a sleepy giant," says Oppenheimer & Co. analyst Steven Eisenberg.

PLUSH PUSH. If it wakes up, it won't be thanks to the hotel business. For the next three years, don't expect much growth in that heavily overbuilt sector, says Los Angeles hotel consultant Saul F. Leonard. Hilton's response has been to sell off its downscale properties and concentrate on ritzy resorts that may weather the glut better. It recently signed agreements to manage a trio of Phoenix resorts. To generate business for its resorts, it has begun time-share sales. And the company is expanding its international Conrad unit by opening tony hotels in Mexico, Saint Martin, and Belgium.

Hilton management boasts that the new hotels will have the company sitting pretty once the economy rebounds. That may be. But even Carl T. Mottek, president of the company's hotel unit, concedes that gambling looks a lot more appealing for now. "You've got to go where the opportunity is," he says. That, of course, was what Del Webb was saying 46 years ago.

By Ronald Grover in Las Vegas and Eric Schine in Los Angeles



**BARRON HILTON'S
GAMBLING EMPHASIS HAS
ALREADY HAD ONE DESIRED
EFFECT: WALL STREET IS
TAKING NOTICE**

Bursting bubbles.



The computer that n

The bubble in the middle doesn't really exist—it's just an image made from reflections of the sky, of the ground, of the other bubbles.

Only they don't exist either. The whole picture is a mathematical fantasy, and the giant computers that put men on the moon would have struggled to create it.

But an IBM RISC System/6000™, which can fit on your desk, did it easily using RISC technology. It was invented by John Cocke, a research scientist at IBM. The RISC System/6000 isn't the only RISC computer, but it is the most advanced thanks to another idea (also Dr. Cocke's) called superscalar technology.

In an historic test at a national research lab,



This picture is also making history.

System/6000 was pitted against a Cray® supercomputer for selected applications, and it won. But even apart from that, the same lab has since replaced one of its mainframes with a network of our smaller machines. We point this out, not to brag (well, maybe a little), but because the RISC System/6000 is fruit of our massive investment in research, and it shows how technology is changing. We spend over \$6 billion a year on R&D, and we do more pure research than anyone. But our top scientists work more closely with real customers, and it helps. For the RISC System/6000, the technology that pioneered its basic technology also led it to

market. And the original lab team not only stayed with it, half of them moved from New York to Texas to join the development team.

As a result, our customers (often researchers themselves) can have massive computing power at affordable prices, to help them improve their own products.

But what hasn't changed about IBM research is the value of a person like John Cocke, who is one of 58 IBM Fellows. It's a title he earned by having great ideas, and it gives him the one thing he treasures most. Complete freedom to have more of them.



THE DREXEL DEBACLE'S 'TEFLON GUY'

Peter Ackerman, Milken's mysterious right-hand man, will emerge with about \$500 million

For all practical purposes, the five-year investigation of Drexel Burnham Lambert Inc. and its principals will end in mid-July with a hearing in federal court in New York. A surfeit of losers frustrates any attempt at determining who was hurt worst by the House of Junk's catastrophic fall. But there's little doubt about who is set to emerge the big winner: Peter Ackerman.

Ackerman, a specialist in leveraged buyouts, was the highest-paid of all of Michael R. Milken's minions. In Wall Street history, only Milken ever made more than the \$165 million salary Ackerman got in 1988, largely in recognition of his leadership in arranging financing for the \$26 billion buyout of RJR Nabisco Inc. But unlike Milken, who is serving a 10-year prison sentence for securities fraud, Ackerman not only has hung on to his freedom but to the bulk of his fortune, which approximates \$500 million. Indeed, it's likely that Ackerman will walk away a wealthier man than Milken by some \$75 million under a sweeping settlement of Drexel-related civil claims pending before U.S. District Court Judge Milton Pollack.

PRIVATE MAN. Ackerman, who holds three advanced degrees from the prestigious Fletcher School of Law & Diplomacy, is putting his fortune to no visible use as he continues an improbable transformation from junk-bond promoter back to scholar. Ackerman, 45, is a visiting fellow at the well-regarded International Institute for Strategic Studies in London, to which he beat a fortuitously timed retreat just before Drexel collapsed into bankruptcy in February, 1990. His other principal affiliation is with the Albert Einstein Institution, a think tank in Cambridge, Mass., devoted to the support of nonviolent political struggle. Both Ackerman and his wife, the novelist Joanne Leedom-Ackerman, sit on its board.

Ackerman declined BUSINESS WEEK's interview request. Indeed, he guards his privacy so zealous-

ly that he won't even give his phone number to the folks at the Institute for Strategic Studies. In pursuit of his new calling, though, Ackerman occasionally pops up in surprising places. In April, 1991, he and two American colleagues spent a week conferring with President Vytautas Z. Landsbergis and other top Lithuanian officials in the barricaded parliament building in Vilnius. Upon returning to London, Ackerman briefly abandoned his low profile to write a prescient *International Herald Tribune* opinion piece, *Nonviolence Would Be Lithuania's Best Weapon*.

To date, anyway, Ackerman has succeeded in checking his Drexel baggage at the gates of academe. "I haven't seen any evidence of a negative attitude out there in scholarly circles because of Peter's connection to Drexel," says Christopher Kruegler, president of Albert Einstein. However, Kruegler is reserving final judgment until next spring, when a book he is co-authoring with Ackerman is due out. Entitled *Strategic Non-Violent Conflict*, the volume is a refinement of the 1,074-page PhD thesis that Ackerman completed in 1976.

Ackerman hasn't entirely abandoned his old trade. In early 1990, he was hired by London-based advertising giant Saatchi & Saatchi Co. to provide top-level advice on an exhaustive financial recapitalization completed last spring. Ackerman

knew at least one of Saatchi's executives from his Drexel days.

Ackerman's smooth transition to a respectable new life galls his former Drexel co-workers, many of whom sent the man for having made so much more money than they did. In addition, Ackerman's colleagues hold him responsible for a good share of the blunder that pushed Drexel into bankruptcy. What finally killed the firm was a huge inventory of unsold, nearly worthless junk bonds that it accumulated in 1989 as it rushed a series of ill-conceived underwritings into the fading junk-bond market. Other Drexelites say that Ackerman rammed through several of the very worst of these last-ditch deals, including a Paramount Petroleum Co. financing that cost Drexel most of the \$60 million it put at risk.

NO DEALMAKING. Ackerman was perplexed with a big pay cut, and he voluntarily shipped out to London. Four months later, Drexel was bankrupt. For Ackerman, the timing of Drexel's Chapter 11 filing was providential. Last February, Drexel sued hundreds of ex-employees seeking the return of \$250 million in bonus payments. Ackerman was not among them. Because he was paid more than a year before the Chapter 11 filing, not a penny of his \$165 million bonus is recoverable under the bankruptcy code. Grouses a former Drexel banker

WHY ACKERMAN SOON MAY BE RICHER THAN MILKEN

Ackerman's compensation was almost in Milken's league...

	MILKEN	ACKERMAN
▶ Biggest annual salary	\$550 million	\$165 million
▶ Distributions from Storer LBO partnership	\$40 million	\$38 million
▶ Number of Drexel partnerships in which he owns a stake	150	150

DATA: COURT FILINGS, BW ESTIMATES

...and he will keep most of the big money that he made

	MILKEN	ACKERMAN
▶ Net worth including family trusts (1/1/90)	\$1,525 million	\$800 million
▶ LESS: Criminal penalties and SEC fines	-\$600 million	-\$0 million
Contribution to civil settlement	-\$500 million	-\$0 million
Estimated total net worth	\$425 million	\$800 million

ter Ackerman is a real Teflon guy." Unlike some other, lower-ranking Milken aides, Ackerman neither cut a deal with prosecutors to testify against his partner in exchange for immunity from prosecution nor was indicted himself. However, the extent to which Ackerman was investigated in the government's criminal probe is unclear. The criminal case against Milken and Drexel consistently of allegations of illicit dealings with Ivan F. Boesky, the infamous "baron" turned government witness. Finally, Ackerman was fortunate that his position did not require him to deal directly with Boesky.

In contrast, Ackerman figured prominently in much broader civil charges brought in 1991 by the Federal Deposit Insurance Corp. and the Resolution Trust Corp. The FDIC and RTC sued Milken, Ackerman, and two dozen others on behalf of failed S&Ls that traded with Drexel. The suit alleged that the "Milken group" routinely manipulated securities markets through a Byzantine network of 280 very private partnerships that reaped huge profits, often at the expense of Drexel's clients. According to the FDIC's complaint, Ackerman owned a 1% interest in 150 of the partnerships "was involved in making trading and investment decisions" for many of them. Milken, Ackerman, and the others named in the FDIC suit denied wrongdoing.

BUY. Many of the lucrative partnerships bought equity in self-financed leveraged buyouts—Ackerman's specialty. For example, financing the LBO of American Communications in 1985, the partnerships allegedly purchased for \$4 million shares promised to bond buyers. In the FDIC says, the shares were sold at a price of \$246 million.

SPRING, ACKERMAN WILL RELEASE HIS FIRST BOOK, A STUDY ON THE SMOOTH TRANSITION TO THE SCHOLARLY LIFE OF HIS FORMER DREXEL AIDES

Milken took \$40 million and Ackerman got the next biggest share—nearly \$38 million, which, by the way, he pocketed in addition to that \$165 million salary.

Like the bulk of the criminal case against Milken, the FDIC's charges will never be tested at trial. In March, a preliminary settlement was announced that would end not only the FDIC action but all 170 of the other civil suits pending against Milken and his ex-colleagues. On July 14, Judge Pollack is scheduled to convene a final hearing in federal court in New York on this so-called

"global settlement" of the Drexel litigation. The judge's approval is expected, since he was instrumental in crafting the plan in the first place.

As the settlement now stands, the Drexel defendants collectively would cough up \$800 million. This sum would be used not only to settle the current litigation but to cover damage awards from any future lawsuits against the settling defendants. Basically, Milken and the others opted to pay now

to eliminate the threat that they might have to pay more later.

For Milken, this assurance was purchased at huge expense—\$500 million, which comes on top of the \$600 million he paid to settle criminal charges. Milken's share of the civil settlement would chop his net worth by 80%, to \$125 million, according to a sworn statement submitted to the court. However, this figure excludes some \$300 million held in trust for his wife and children. At Judge Pollack's orders, none of the contributions made by other defendants have

been disclosed. Knowledgeable sources say, however, that Ackerman would make the second-largest payment, of \$80 million, or roughly 15% of his net worth.

Why the disparate standards of settlement? Officially anyway, culpability had nothing to do with it, since no settling defendant had to admit any wrongdoing. The best explanation is, in a word, politics.

UPROAR. When the terms of settlement were unveiled in March, the FDIC was blasted for letting Milken off too easily. Buffeted by the backlash, the FDIC's board voted to reject the settlement crafted by its own lawyers, only to reverse itself a few days later. Amid the uproar, the name Ackerman was scarcely heard. "You could not take away enough money from Mike to satisfy certain people in Washington," one Milken adviser says. "But you won't find anyone walking around the Hill saying, 'We've got to get Peter Ackerman.' They don't even know who the guy is."

Even to former colleagues, Ackerman remains a mystery. "With Peter, you never got too personal," says one Drexelite who was friendly with him. Like Milken, Ackerman never allowed Drexel to publish his photo. And in his dealings with the press he aspired to invisibility and nearly at-

FROM WALL STREET TO VILNIUS

1968 Graduates from Colgate University

1971 Earns second master's degree from the Fletcher School at Tufts

1973 Hired by Drexel's president as his assistant

1976 Earns PhD from the Fletcher School

1978 Joins Milken's junk-bond group and moves to Beverly Hills

1981 Established as Milken's special projects aide

1984 Works on his first buyout with Kohlberg Kravis Roberts & Co.

1988 Plays the critical role in financing KKR's \$26 billion buyout of RJR Nabisco in Milken's absence; receives \$165 million paycheck

1989 Moves to London just four months before the eve of Drexel's bankruptcy

1990 Leaves Drexel and is appointed visiting fellow at the International Institute of Strategic Studies

1991 Confers with top Lithuanian officials in barricaded Parliament building in Vilnius

1992 Agrees to pay \$80 million to settle civil suits

DATA BW



tained it. Even in the growing number of books about Drexel, Ackerman is nothing more than a shadowy bit player.

He has taken self-effacement to an almost literal extreme, adopting and shedding a series of identities so seemingly contradictory that they tended to obscure one another. This scholar turned Wall Street dealman turned scholar was raised in a middle-class Jewish household and even attended yeshiva before graduating from Far Rockaway High School in Brooklyn. Yet during his college years at Colgate University and the Fletcher School he became a devout follower of Christian Science after meeting Joanne Leedom, whose mother was a Christian Science teacher. Leedom worked as a reporter for the *Christian Science Monitor* from 1969 to 1972. Ackerman and Leedom were married around 1971 and have two sons.

'MASS OF CONFLICTS.' Although he specialized—brilliantly—in political science all through college, Ackerman followed his father and older brother into commerce. In 1973, he joined Drexel as administrative assistant to its president after “failing at a quixotic effort to improve Third World living standards by setting up a pan-African trading company that trucked cattle from Niger to Lagos,” according to *Merchants of Debt: KKR and the Mortgaging of American Business* by George Anders. Says one of Ackerman's early Drexel mentors: “Peter had a burning desire to prove himself in business but also had a strong, almost religious belief in doing good works. He was a mass of conflicts in that respect.”

Ackerman struck his co-workers at Drexel as a miscast academic—highly intelligent but theoretical, quirky, and slovenly. Yet he had a subtle talent for cultivating people able to further his career, notably Milken, who even then was secretly making a fortune. One of Ackerman's first bosses was startled to learn from his young assistant exactly how much Milken was making. This fellow was even more startled in 1978 when Ackerman accepted Milken's offer to join his junk-bond group, which promptly decamped to Beverly Hills.

Impressed with Ackerman's unconventional intellect and breadth of knowledge, Milken made Ackerman his special projects man in the freewheeling Beverly Hills operation. This meant helping Lowell Milken, Michael's brother, set up many of the partnerships later investigated by the FDIC. It also meant custom-crafting financings for Occidental Petro-

leum Corp. and other major clients. And when Drexel began financing LBOs in the early 1980s, Milken turned to Ackerman, who, by all accounts, was an ingenious, tenacious financier.

Milken demanded fanatical effort, and Ackerman delivered, eventually establishing himself not only as the linchpin of many of Drexel's most important client relationships but as a buffer between Milken and the rest of the firm. “Peter's role just grew and grew until he became Michael's alter ego,” says another member of Milken's inner circle. “He quoted Mike all the time and started to talk just like him.” In terms of appearance, meanwhile, Ackerman was transformed from a “frumpy, overweight, college-professor type to this sleek, blue-suited, Turnbull & Asser deal machine.”

In short, Ackerman was absorbed into Milkenism as thoroughly as he had embraced Christian Science. Indeed, he appears to have been simultaneously devoted to both. Like Milken, Ackerman spent quite modestly on creature com-

forts during his years of immodest come. Even so, how could Ackerman have reconciled his junk-bond dealings with the staunch antimaterialism of Christian Science? Only a novelist could plausibly answer that question. The son who knows Ackerman best, Joanne Leedom-Ackerman, hasn't written a novel, though she did leave a book about her own means of coping in *Dark Path to the River*.

GOOD CAUSES. Published in 1988, *Dark Path* features a young investment banker and his ex-journalist wife, Mark and Jenny Rosen. In counterbalance to Mark's mounting income, Jenny writes checks. “Mark called such checks payments to the gods, her attempt to balance an imbalanced world.... When they went on vacations, she came home and wrote checks to camp scholars, funds,” Leedom-Ackerman writes. “When they bought new clothes, they contributed to Good Will.”

Of course, in this case, the truth is a whole lot richer—and more problematic—than fiction. How does one go about appeasing the gods for a \$165 million Drexel paycheck?

By Anthony Bianco in New York, Sana Siwolo in London



NOVELIST JOANNE LEEDOM-ACKERMAN

BANKING

NOW, THE THIRD WORLD MAY DO BANKS A WORLD OF GOOD

They stand to profit from renegotiations with debtor countries

For years, bankers have spelled misery L-D-C. During much of the 1980s, it seemed as if less-developed countries would never be able to repay the mountain of debt that banks had lent them over the years. The global banking system came under growing strain as Latin American governments defaulted on interest and principal payments. In the U.S. alone, banks took a staggering \$25 billion hit in 1987 to build reserves against Third World debt.

Now, however, the LDC crisis may be coming to a welcome end. The biggest debtors have been negotiating settlements with banks. Moreover, some pending deals could prove an unexpected financial bonanza to several big banks with the largest LDC exposure.

Bankers reached an agreement with Argentina in April and are nearing a pact with the last big holdout, Brazil. Under the terms, the banks will sell most of their nonperforming loans as interest-bearing bonds backed by U.S. Treasury securities purchased by Argentina and Brazil. That should eventually translate into earnings gains for the banks, because the value of the bonds

will be greater than the value of the nonperforming loans, which banks have heavily written down. The debt accord will also help clean up bank balance sheets and free up much of the remaining \$4 billion in U.S. banks have in reserves against Third World debt.

Of the dozen or so U.S. banks with significant

The accords should free up much of the \$4 billion that U.S. banks still have in reserve against Third World debt



WHO
Knows Money Management
 BETTER THAN
 THE NAME THAT
 inspired it.

IN 1830 *Judge* SAMUEL PUTNAM, presiding in the Massachusetts SUPREME COURT, *created* the GUIDING PRINCIPLE for professional MONEY MANAGEMENT. His PRUDENT MAN RULE states that when managing a client's INVESTMENTS one should be PRUDENT, and treat THEM as SAFELY as if they *were* ONE'S OWN. In 1937, INSPIRED by this INHERITANCE, his *great-great-grandson* FOUNDED our COMPANY. Since then we've been THRIVING, INNOVATING and LIVING by the wise judge's RULE. And with more than \$50 billion in FIXED INCOME and EQUITIES, it's a heritage our CLIENTS continue to BENEFIT FROM *today*.



A TIME - HONORED TRADITION
 IN MONEY MANAGEMENT

The Putnam Companies One Post Office Square, Boston MA 02109.

LDC debt on their books, "all stand to gain to some degree," says analyst Diane B. Glossman of Salomon Inc. But the biggest winners are expected to be such major institutions as Citicorp, Chemical Banking, Chase Manhattan, and BankAmerica (table).

So far, bankers are playing down any talk of a windfall—and for good reason. When Argentina and Brazil repay their debt, banks will merely be collecting money already owed them. Even then, banks will never recover the entire amount. What's more, analysts say, bankers are hesitant to draw attention to their potential profits for fear that Brazil could harden its stance in current debt talks. All the same, "obviously, it will be positive for us," says Citicorp Vice-Chairman William R. Rhodes, a lead negotiator for the banks.

BRADY'S BUNCH. Banks negotiated similar loan-for-bonds swaps with Mexico and Venezuela in 1990. The bonds came to be known as Brady bonds, after Treasury Secretary Nicholas F. Brady, who crafted the idea. Yet the current deals are far more lucrative for the banks, because they have written off so much of their LDC debt since then. Under the pact with Argentina, which will likely be copied for Brazil, banks have two options: They can forgive 35% of their loans in exchange for floating-rate bonds, or they can receive the face amount of their loans in below-market, fixed-rate bonds. Both have 30-year maturities.

Interest arrears, which aren't carried on bank balance sheets, would be paid off in a similar fashion. Argentina, which owed \$8 billion in back interest at the end of 1991, will pay out \$700 million in cash and short-term securities and the rest in 12-year, floating-rate bonds that are not collateralized.

The impact of these swaps on banks' financial statements could be dramatic. Argentine loans are valued on the books at most banks at 30¢ on the dollar; Brazilian loans vary from

35¢ to 37¢. In both cases, banks could receive securities with a face value of 65¢ on the dollar after debt forgiveness.

In theory, banks could book the difference as income if they eventually sold their bonds. Argentine debt was recently trading at 48¢ on the dollar and could trade higher when the banks finally exchange loans for bonds, possibly by the end of the year. Bankers, however, will probably wait to see how the new debt deals work out before deciding what to do with their bonds. Even then, individual banks may account for the asset swap differently.

loan-loss provisions, which have been a drain on bank earnings in recent years.

The biggest beneficiary may be Chemical, which has \$1.3 billion in reserves against LDC loans. If Chemical switches that amount into its general reserve against bad loans, Berry estimates, its reserve coverage, a key measure of its ability to cope with bad loans, would rise to 85% from 66%.

Finally, bankers are eager for more business in Latin America once the debt pacts are wrapped up. Although there's little interest in government lending, bankers are scrambling to do investment

Even if banks keep their bonds, revaluing them upward over their full-year lifetime, there are bound to be bottom-line benefits. Moreover, analyst David S. Berry, Keefe, Bruyette & Woods Inc., estimates that banks will earn twice as much interest from Brady bonds as they otherwise would have from Argentina and Brazil. All this means more income. Chemical and Citi, Berry says, might earn an extra 40¢ to 45¢ a share next year. Keefe Bruyette currently expects Chemical to earn \$5.50 a share in 1993; its forecast for Citi is \$2.70.

LATIN LOVERS. The benefits also extend to banks that already have drawn on their Third World debt reserves to shore up provisions against other bad credits, such as commercial real estate loans. But the banks could pick up at some point if Argentina and Brazil keep up timely interest payments on their bonds. If so, this could reduce the amount of future

banking and trade finance in the strengthening economies of Latin America. "These countries that were very bad credits in the past are some of the biggest export clients [for the U.S.]," says Citi's Rhodes. Indeed, with the debt question dormant, bankers are betting that in the 1990s the Third World may generate big profits, not bad loans. The letters L-D-C, it's become clear, now spell relief.

By John Meehan in New York



HEFTY RECOVERIES FROM THIRD WORLD DEBT

Bank	Original loan amount	Current book value	Face value after renegotiation*	Apparent gain
Millions of dollars**				
CITICORP	\$4,020	\$1,436	\$2,613	\$1,177
CHEMICAL	3,590	1,285	2,334	1,049
CHASE	2,030	716	1,320	604
BANKAMERICA	1,950	655	1,268	613

* Amounts based on bonds banks may receive after forgiving 35% of debt owed

** Estimated figures for Argentina and Brazil

DATA: KEEFE, BRUYETTE & WOODS INC.

PRINTERS THAT WORK WHEREVER YOU WORK!

Now there's a Kodak Diconix printer for you,
wherever and whenever you work. Who gives you a choice
of mobile and portable printers? Kodak!



Some people want a quality
desktop printer that's small
and light enough to carry
between home and office.

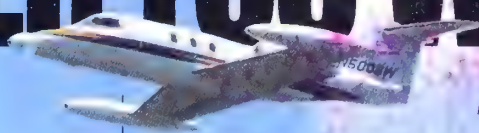
Some people want a portable printer that's compact and rugged
enough to print anywhere, anytime. Now Kodak offers both!

compact pro, the mobile desktop printer.

The new Kodak Diconix 701 printer delivers professional-quality
text and graphics on your desktop, at the office, at home—or



New Kodak
Diconix 701 printer.
The compact pro.



in-between, with the optional

battery. Yet the footprint is smaller than a sheet of paper,
even with the built-in 30-sheet feeder.

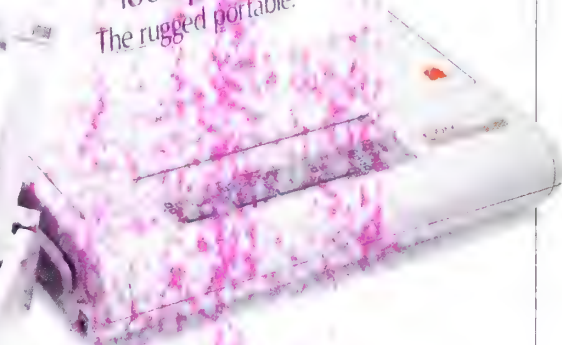
The one for the road: a remarkably rugged portable.

But if you often print on the go, see the Kodak Diconix 180si print-
er. This is a true portable, incredibly light and compact, yet ruggedly
reliable. Now you can print anywhere you can write, even
at 40,000 feet! And it offers unbeatable value.

Wherever you work, don't wait. Call for
the name of a dealer of Kodak printers
near you in the U.S. and Canada.

1 800 344-0006, Ext. 413.

Kodak Diconix
180si printer.
The rugged portable.



KODAK

Kodak Diconix printers



When's the last car chase that



It was as if a starter's gun had been fired.

The year was 1976, and the Honda Accord arrived much to the delight of America's drivers and critics. And much to the dismay of other automotive designers and engineers.

After all, this was a car with a totally different interpretation of efficiency, comfort and performance. An automobile so thoughtful, practical and complete in its design, the competition had no other choice than to follow in its tracks.

Now, more than a decade and a half later, the Accord continues to perform an amazing feat. Each year, it somehow improves.

For instance, the interior. It's surprisingly large, and amazingly quiet. When



makes it more comfortable than you ever imagined. You'll notice it when you sit in the firm, contoured seats. When you slide open the power moonroof. And when you ride silently over bumps and through dips.

The refinements underneath the hood have been equally dramatic. A fuel-injected, 140-horsepower engine gives the Accord more power than ever before. And the 4-wheel double wishbone suspension translates into tremendously airy

ime you saw a asted 17 years?

ddling. The result is truly amazing. You can respond confidently to virtually
driving situation you might encounter.

This car also excels in safety. A driver's side airbag is now standard. Along
h a sophisticated anti-lock braking system to help you control the car on rain-
k surfaces. You can actually steer the car while braking.

The body is also quite enviable. The lines are clean and smooth. The fit
l finish are consistently excellent.

Not surprisingly, workmanship like this has produced a bounty of rewards.
e Accord has been the best-selling car in the U.S. for the past three years. And
onsistently appears on all the "top 10" lists for cars in its category.



Considering all these facts, one comes to a rather obvious conclusion. The
ord has always been, and continues to be, a true industry standard. The car
which all others in its class are measured and judged.

And while the competition remains relentless in their quest to catch us, we
ain dedicated to building a car that's a few years ahead of them. Which means
chase might be just getting started, after all. The Accord EX. 

GDC CHANGED ITS NAME, BUT BAD LUCK KEEPS FINDING IT

Now the Florida developer's CEO is in hot water

Miami-based General Development Corp. specializes in homebuilding. But to judge from recent history, its main product is trouble. Indeed, the GDC saga is a veritable mini-series of corporate misdeeds and misfortunes: It and top executives get indicted on 16 fraud counts in 1990, forcing the company into Chapter 11. GDC then settles the federal case by pleading guilty to one count, sets up a restitution program for angry home buyers, renames itself Atlantic Gulf Communities Corp., and emerges from bankruptcy in March.

But the future is still murky. Its new restructuring plan is dicey, and the Florida real estate market remains anemic. Looming ahead is the final phase in the trial of GDC's former top officers, who are contesting the fraud charges. Even worse for public relations, the new CEO, J. Larry Rutherford, must guide the builder through tricky shoals while dealing with a personal problem: He faces

charges of drunk driving, vehicular homicide, and manslaughter.

The woes of GDC (table), founded in 1955 and once one of the nation's largest developers, stem from an alleged scheme to defraud gullible buyers of its Sunshine State houses. A federal grand jury alleged that GDC inflated housing values and misled buyers, who trusted the developer's reputation and its New York Stock Exchange listing.

'A LOT OF CONCERN.' With the trial of GDC's former leaders resuming in June, the aroma of the purported real estate scam won't fade quickly. Despite the company's guilty plea, former Chairman David F. Brown, ex-President Robert F. Ehrling, and two other since-departed executives are continuing to fight. Lawyers for the defendants argue that any misdeeds by GDC can't be tied to their clients. Plus, they say adequate pricing disclaimers were made on company literature. "Caveat emptor," says

Richard Sharpstein, a defense lawyer.

Then there are the legal problems of new CEO Rutherford. A year ago, state police, he had too much to drink and his car spun out of control, causing a collision that killed his passenger, close friend, Philip Birdsong. His driving record shows an earlier drunk-driving conviction and a violation for refusing a breathalyzer test on another occasion. Rutherford has pleaded innocent. His lawyer, J. David Bogenschutz, says his client will be exonerated. He calls the blood-alcohol test flawed in the Birdsong incident and says Rutherford's driving record may be inaccurate.

For the homebuilder, the larger question is whether Rutherford, who has four years to go on a five-year employment contract, can discharge his duties as his case goes forward. Some of the eight board members—all are new—are worried. "There is a lot of concern—is this a criminal charge," says one.

But Bogenschutz argues that the charges "are not business-related and don't affect his ability to manage." Company Chairman James Aphorppresses confidence in Rutherford, successfully guided GDC through bankruptcy. Previous board members note change in his job performance.

Rutherford is banking on the new Atlantic Gulf's raising \$150 million to \$200 million over the next three years by selling 40% of its 87,000 acres and most of its nine water-and-sewage plants. "This will be a viable community developer" again, he pledges.

Yet the odds are long. Three of the plants are tied up in litigation proceedings, and land values may be optimistic. Further, the earnings outlook for homebuilding is cloudy. Fort Lauderdale real estate analyst Lewis M. Goodman says the Florida retirement market, GDC's long-time focus, will be sluggish in the 1990s. Sales last year dropped 45% from their 1986 peak. This arena is dominated by low-cost builders, so the revamped company faces rampant price competition and squeezed profit margins.

In the end, Rutherford precedes, a new name is not enough. The developer must rebuild its image. The company stresses that all activities will be monitored by a court-sanctioned program, as part of its probation. "If reputation is lost in a minute, it is earned over a lifetime," says Rutherford. Given all the obstacles, he can only hope it will take that long.

By Gail DeGeorge in Miami

GDC'S MANY TRAVAILS

MARCH 1990 General Development Corp., a subsidiary, and top executives David F. Brown and Robert F. Ehrling are indicted on fraud charges

APRIL 1990 GDC and subsidiaries file for Chapter 11

NOVEMBER 1990 Company pleads guilty to single count of mail fraud. Agrees to pay disgruntled home buyers up to \$160 million in restitution

MARCH 1991 J. Larry Rutherford named CEO. Involved in auto tragedy in April. Later charged with vehicular homicide

MARCH 1991 GDC emerges from bankruptcy court renamed Atlantic Gulf Communities Corp. Plans to sell off land and other assets and return to homebuilding

JUNE 1991 Trading to begin on new company's stock, but outlook uncertain with real estate market depressed. Delayed trial of Brown and Ehrling, who have left the company, to resume. Rutherford's auto case still pending. He pleads innocent

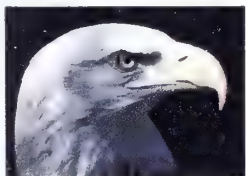
DATA BW



RUTHERFORD: CHARGED WITH VEHICULAR HOMICIDE



"Memorial Day weekend, 1991. I was home, relaxing, having a good time. Little did I know that back at the office trouble was brewing." Last year, lightning struck the air conditioning at Guinness America, Inc. headquarters. And even though nobody was around, it was too hot and the phone system shut down, an AT&T Mega Watch™ technician spotted the problem immediately. AT&T Mega Watch is an exclusive AT&T MEGACOM® service. AT&T technicians monitor your phone equipment 24/7, spotting trouble before you can, and coordinate repairs. The service gives you one contact person for any network and equipment problems that may impact your AT&T MEGACOM WATS service. Thanks to AT&T Mega Watch, a repair technician was at Guinness headquarters early Tuesday morning, and they were back in business by 10:30 A.M.



AT&T Mega Watch is one of many striking ways that AT&T MEGACOM WATS can give an edge to businesses that spend at least \$3,000 per month in outbound long distance.

And all the technology, service and innovation are in addition to the deep discounts of AT&T's biggest WATS savings plan.

*What's more, if you sign up by June 13, 1992, we'll waive installation and start-up charges, which average \$2100.**

So call your AT&T Account Executive, 1 800 247-1212, ext. RX9, or return the coupon today. The more your business depends on outbound long distance, the more your business needs AT&T MEGACOM WATS.

Installation must be accepted by September 13, 1992. Customer must maintain service for six consecutive months with minimum average usage of \$1,900 per new contract. Minimum Number. Other restrictions may apply.

☐ Yes, your AT&T MEGACOM® WATS service with AT&T Mega Watch™ strikes me as a good idea. Please send me more information, today.

Name _____ Title _____

Company _____ Telephone number _____

Address _____

City _____ State _____ Zip _____

Current long distance service _____ Average monthly outbound long distance usage _____

To receive free AT&T MEGACOM WATS installation and start-up costs you must sign up by June 13, 1992 for installation by September 13, 1992

Other restrictions may apply. Call your AT&T Account Executive or 1 800 247-1212, Dept. RX9 or mail this coupon to AT&T, P.O. Box 45038, Jacksonville, FL 32232-9974. Or, if you prefer, fax it to 1 800 248-2492



© 1992 AT&T

AT&T MEGACOM WATS OUTBOUND LONG DISTANCE SERVICE

BY GENE G. MARCIAL

THIS HEALER OF HEARTS PUMPS OUT PROFITS

The way Medtronic plunged from 99 a share at the beginning of the year to 65 in late April, it looked as if this leading producer of cardiac pacemakers was in dire need of one of its own resuscitators. Then a few big investors started buying in, and Medtronic started to recoup, rising to 74 by May 26. Now some pros believe Medtronic is on its way to a full recovery.

The reacceleration, they argue, will be spurred by Medtronic's new Pacer-Cardioverter-Defibrillator, or PCD (page 116). The device will be approved for marketing by the Food & Drug Administration as early as August, say some pros.

Up to now, pacemakers regulate a heart that beats too slowly. This new defibrillator is designed to treat patients who suffer from a too-rapid heartbeat—ventricular tachycardia—or the more serious ventricular fibrillation. The latter leads to sudden death. Says analyst John Calcagnini of Seidler Amdec Securities: "Medtronic's PCD device offers a staged therapy to treat tachyarrhythmias," or very rapid heartbeats. The PCD unit could "be on the market by September and generate sales of \$100 million in its first year," he figures. They are priced at \$20,000 each, says Calcagnini. The device, which Medtronic has been successfully marketing in Europe since March, 1991, received a favorable recommendation from an FDA panel in February.

ELECTRIC PULSE. Calcagnini says the market for pacemakers that defibrillate a too-rapid heartbeat should grow to \$1 billion over the next five years. It's now estimated at around \$250 million worldwide. "We expect this market to become a major source of growth for Medtronic," says Calcagnini, who notes that about 500,000 Americans each year suffer sudden cardiac death, usually caused by an abnormal heart rhythm, or arrhythmia.

Medtronic, which posted revenues of \$1.04 billion in 1991, controls some 45% of the \$1.4 billion market for bradycardia pacemakers, used in the treatment of heartbeats that are too slow. Pacemakers consist of implantable pulse generators that produce electrical impulses and leads, which are conducted to the heart. The generator is implant-

IS MEDTRONIC ON THE WAY TO RECOVERY?



ed in the chest or abdomen. Medtronic also makes prosthetic heart valves, angioplasty catheters, and oxygenators.

Medtronic, scheduled to release fiscal '92 results in June, is expected to report better-than-expected earnings. Analysts expect fiscal '92 earnings of \$2.65 to \$2.78 a share. Calcagnini expects earnings to climb to \$3.13 a share in 1993 and to about \$3.90 in fiscal 1994. He thinks the stock could trade at 115 a share in the next 12 months.

Analyst Alan Sebulsky of Morgan Stanley says Medtronic appears poised to wrest the lead in the defibrillator market from Eli Lilly once Medtronic's PCD device gets FDA approval. With Medtronic's experience with pacemakers and marketing muscle, it's likely to dominate the U.S. market within two years of approval, he says.

RING THIS BELL FOR A GOOD BUY?

Value investing is again in vogue on Wall Street, and one company that's sending a buy signal to value investor Scott Black is Bell Industries, a major distributor of electronics components. What caught Black's eye was the stock's drop below its book value of 15 a share, a healthy balance sheet, and a relatively low debt-to-equity ratio.

Black thinks that Bell, now trading at 11½ a share, "is underpriced considering that the company is well on its way to a sharp earnings turnaround." Black, president of Delphi Management in Boston, has accumulated some 4% of Bell's stock. He thinks it's worth at least 20 a share.

Bell Industries, which reported sharp earnings decline in fiscal 1991, won't post any profit this year. But Black sees a turnaround in fiscal 1992, which starts July 1. He expects earnings of 95¢ a share vs. 1991's depressed 12¢. And he sees a big earnings jump to \$1.80, in fiscal 1994.

Next fiscal year's orders are up 25%, says Black. The bulk of earnings, some 68%, comes from electronics distribution and manufacturing. Bell also distributes motor vehicle parts, building products, and graphic arts supplies.

Black says the good news should continue in the subsequent years as Bell streamlines operations and slashes operating costs. He believes return on equity over the next three years should be in the 13%-to-14% range, with earnings rising to \$2.50 by 1995.

A RARE FIND AT THE PAWNSHOP

Believe it or not, pawnshop operators have started to grab some attention on Wall Street. But investor support is still quite fragile. When EZCORP, which operates 93 pawnshops, posted lower-than-expected second-quarter results on Apr. 27, the stock tumbled from 17 a share to 12½ that day. The stock has stayed weak and is currently at 12¼.

At that price, EZCORP is quite attractive, says money manager Tom Maguire of Safeco Asset Management. He argues that in the highly fragmented pawnshop business, there are only two publicly traded companies: EZCORP and the larger Cash America Investments. Maguire prefers EZCORP because of the faster-growing company.

Indeed, the company has more than doubled the number of stores this year. And fiscal 1992 will show a "18% earnings increase, to \$3 million—or 3¢ a share, even with a 72% increase in shares outstanding—on a 110% revenue gain to about \$50 million," says Dennis Van Zelfden, an analyst at Rauscher Pierce Refsnes in Dallas. A strong balance sheet comprised of minimal debt and cash of roughly \$30 million, or \$3 a share, should fund stock growth through fiscal 1993, he adds.

Another EZCORP bull, Charles Roden, managing director at Josephthal Lyons & Ross, expects the company will have 185 stores by the end of next year, when he expects earnings of 90¢ a share. "At the rate the company is expanding, the stock could double in two years," says Roden.

JAPANESE 'FLOP' THAT BECAME A LAUNCHING PAD

wards may one day flow from its push into artificial intelligence



GAGA AND DNA MODEL: HUNDREDS OF ENGINEERS UNITED FROM THE FIFTH GENERATION PROJECT

Remember Japan's Fifth Generation Computer Project? In 1981, when the powerful Ministry of International Trade & Industry (MITI) announced this ambitious research effort, Japan in the forefront of artificial intelligence, shudders ran through the halls in the West. Support surged from the EC's ESPRIT electronics research program. Britain convened the Alvey Committee to map a response. And in the United States, the MCC consortium of 21 companies came up to preserve America's lead in computers. Unless action was taken, warned MITI. Dertouzos, director of Massachusetts Institute of Technology Laboratory for Computer Science, the computer industry would easily find it in the same position vis-à-vis Japan as it is now. At response now is overblown. After the Fifth Generation

hasn't produced computers that "think." Nor has it given Japan the edge in "parallel" systems using hundreds of microprocessors for attacking giant computer problems. Those were top priorities for MITI.

But in failing to achieve those goals, Japan scored an important success: The Fifth Generation forged a new computer-research infrastructure in Japan that brought together scientists in business, government, and academe. And it trained a whole generation in some of the toughest disciplines of artificial intelligence programming (chart).

Now, with the \$415 million project winding down, MITI will try to use it as a launching pad for more research. On June 1, the Institute for New Generation Computer Technology (ICOT), the project's coordinating body, will lay the Fifth Generation to rest at its final conference. But MITI will spend \$770 million over 10 years on a follow-on effort called the Real-World Computing Project. This time, the focus is on "neural network" systems, patterned on the human brain,

that can learn and discern patterns in real-world situations where data is incomplete or where the number of variables is vast—as in macroeconomics or social behavior.

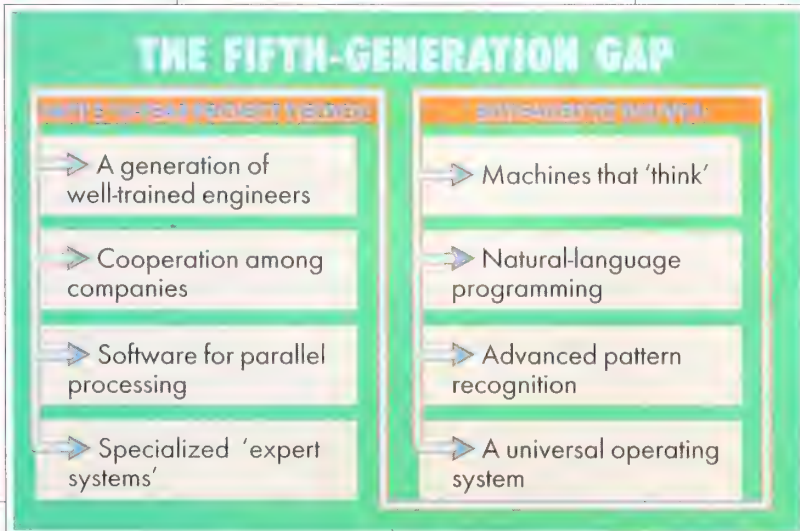
That's where the legacy of the Fifth Generation may help. Before ICOT, Japan had nothing to rival computer laboratories such as those at MIT, Stanford, and Carnegie Mellon, which drew funds from the U.S. Defense Dept.'s Advanced Research Projects Agency (DARPA). "Everything America has [in computers] came out of a small group of dreamers supported by DARPA," says John Gage, Sun Microsystems Inc.'s director of science. "Building a similar community was vital for Japan."

A RICH LEGACY. Back in 1982, "we were starting from scratch," says Shunichi Uchida, manager of ICOT's Research Dept. Now, says ICOT watcher Ross A. Overbeek, a scientist at Argonne National Laboratory in Illinois, Japan has a competitive intellectual infrastructure. "The big Japanese companies are seeded with people who know the merits and the drawbacks of the technology." One such Fifth-Generation veteran is Akihiko Konagaya, now an NEC Corp. research manager. He worked with ICOT from the start, developing genetic analysis applications for KLI, ICOT's parallel programming language. The machine it runs on will be shown at the conference. "If ICOT hadn't defined the goals and provided funding," says Konagaya, "few companies would have supported this."

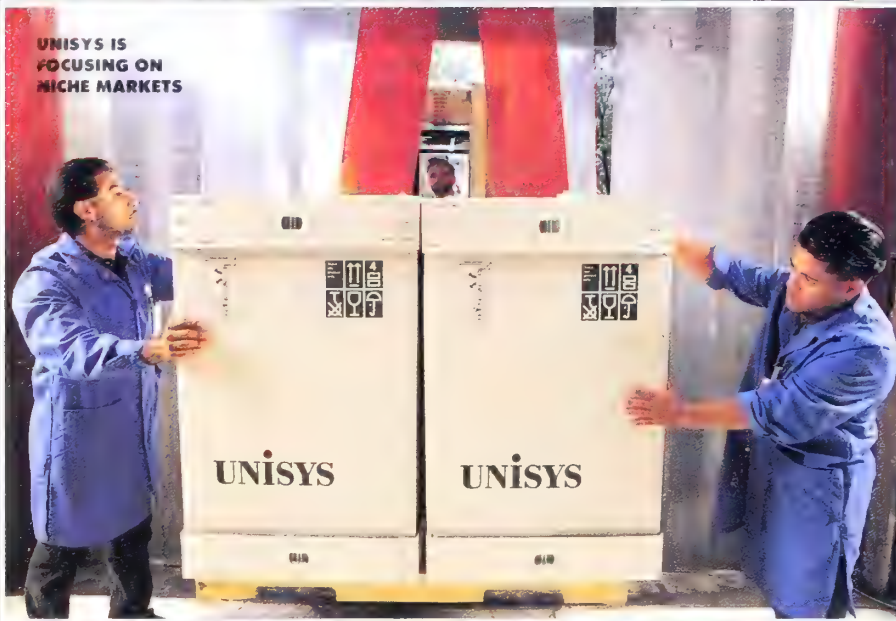
Even as they acknowledge the Fifth-Generation legacy, many Japanese are looking at why the project fell short. Most obviously, rapid microprocessor advances in the U.S. left its massively parallel computer design in the dust. By the late 1980s, such ICOT members as NEC, Fujitsu, and Hitachi saw their chips couldn't match those of the Americans. So they stopped pursuing development on Fifth Generation computers.

Now, they are gearing up for the Real-World project. They may fail miserably. But nonetheless, there is again reason for the West to pay close attention. "The people you see in the companies now, the ones working on the advanced stuff, they are the Fifth Generation," says MIT's Dertouzos. And now, they're ready for the Real World.

By Neil Gross in Tokyo



MAINFRAMES



UNISYS: OUT OF THE BLEAK AND INTO THE BLACK

After agonizing cuts, it posts two profitable quarters. Will it last?

This was an order that Unisys couldn't afford to lose. For more than 20 years, Blue Cross Blue Shield of North Dakota had been a customer of Burroughs Corp., a predecessor of Unisys Corp. On paper, the health insurer was a sure bet to trade up to Unisys' powerful new A19 mainframe, which would let it expand its claims processing, then running on three smaller Unisys machines.

But Blue Cross officials couldn't make up their minds. They had no gripe with the A19's performance or price; they worried about Unisys. In 1991, the Blue Bell (Pa.) computer maker was headed toward a \$1.4 billion loss as sales skidded from \$10.1 billion to less than \$8.7 billion and management took huge write-downs to cover layoffs and cost-cutting. Lenders were getting jittery, as was Blue Cross. "It was very bleak," recalls Darrell Vanyo, vice-president for information services. Reluctantly, he started looking at his options, including an expensive changeover to IBM hardware.

Then, in May, James A. Unruh, Unisys' genial CEO, rode into Fargo. Unruh got on well with fellow North Dakotan Michael Unhjem (pronounced "UN-jem"), the health plan's CEO, perhaps because both were alumni of the state's

tiny Jamestown College. But even after Unruh laid out his plans for revitalizing Unisys, Unhjem was hesitant to shell out \$5 million for what would be the first A19 sale in the U.S. After much sweat, Unisys got the order in the fall.

ON THE MEND. Now, both Dakotans are breathing easier. Unisys has made money in the past two quarters—the first back-to-back quarters of profit since 1988. Indeed, it's loping toward a modest full-year gain for 1992—perhaps more than \$100 million in net profits, analysts project. And in June, Unisys is planning to float a \$200 million convertible-note offering, intended to refinance some of its \$3.2 billion debt load. Proclaims the CEO: "The turnaround is succeeding. We feel we're on track."

But can it last? Even as customers and investors applaud Unruh's progress, they question his ability to fashion a long-term growth strategy.

By most accounts, the company has done well controlling costs. The severity of its problems forced it to be far more aggres-

sive than IBM or Digital Equipment Corp. in cutting overhead. Since 1987, the company payroll has shrunk 30% down from 93,000 to an estimated 57,000 by the end of this quarter. In the same period, IBM has cut its payroll 11%. Unisys' overhead is now less than 29% of sales, vs. IBM's 38% and DEC's 32%, helping it boost cash flow and its stock price. Since the nadir of Unisys stock fell around 3 last year, the share price has tripled, breaking 11 in February before settling at around 9. That's a far cry from the August, 1987, peak of 48, enough to interest new investors.

Unruh, 51, also has honed the business plan to boost revenue from software and services, which are more profitable than hardware. When Burroughs and Sperry merged, software and services accounted for a paltry 8% of revenues. But by last year, their share had swelled to \$1.8 billion, or 21%, just behind mainframe and peripheral sales of \$2 billion, or 23% of revenues.

LEANER, HUNGRIER. Hardware operations, meanwhile, have been radically streamlined. Unruh has axed thousands of poor-selling items from the Unisys catalog and closed 7 of 15 factories worldwide in the past 18 months. So Unisys will buy, instead of make, many low-end PCs. Unruh has curbed development for two slow-selling mainframe lines while concentrating on two primary mainframe families—the A series for former Burroughs customers and the 2200s on the Sperry side—and on fast-growing "open systems" based on industry standards such as Unix. So far, though, Unix-related sales account for probably less than 10% of revenues.

Unisys is also refining software and hardware to address tasks in specific industries. For example, it now commands the market in check-processing systems used by banks and insurers. "They're an important partner for us," says James Palmer, chief technology executive at Barnett Banks Inc. in Jacksonville, Fla., which picked Unisys for a \$10-million-plus overhaul of its check-handling system. Unisys is also gaining ground among telephone companies supplying voice-mail systems. One recent customer: New England Telephone & Telegraph.

Unisys is even turning a profit in the generally dismal defense business. It couldn't find a buyer for its \$2.1 billion-a-year amax weapons-systems subsidiary last fall. Then, it planned a

THE SURGE AT UNISYS



DATA: BRIDGE INFORMATION SYSTEMS INC.

million stock offering to take Paramar, but canceled the issue because of slack interest on Wall Street. Now, Unruh is trying to steer Paramar into nonmilitary markets such as traffic control and weather-tracking. Paramar aims to boost nondefense sales 20% today to more than 25% by 1993. For now, Unruh says he has no intention to sell the unit. "We're fortunate because we don't build submarines, aircrafts, ships, or tanks," says Paramar



AS SHUT
CTORIES

President Frederick F. Jenny. "We're in the business of information systems." **MATCHMAKING?** Unruh, who began his professional life as a financial analyst, gets credit for shoring up Unisys' finances. With some \$800 million in cash, he should be able to cover periodic principal payments, such as the \$150 million due lenders in September. And prospects are good for rolling over a \$1 billion revolving credit line in January. Debt is still a teeth-ting 60% of total capital, but that will come down and could shrink below 40% of capital by yearend 1993, says Rick J. Martin, research director of Chicago-based brokerage firm. Martin, a long-time bull on Unisys, says: "We're going to look at Jim Unruh as having pulled one of the most significant turnarounds in history."

But, the long-term picture is quite uncertain. Unisys' profits depend primarily on mainframes even as the computer business is quickly becoming dominated by commodity-like desktop machines. Same revenue growth is expected to be flat at best in coming years, and where Unisys turns for new business competition is brutal and profits are thin. That, say analysts, could eventually push the company into the role of a Japanese giant such as Toshiba, Hitachi, or Fujitsu. Already, Mitel Co. owns a stake equaling nearly 10% of Unisys.

A smart move now, argues George Adamood, an analyst at consultants EY Group, would be for Unruh to get the best deal he can negotiate. But if he has shopped the company around, Unruh says: "I could not comment. That's been our standard answer." It's not out, however, that Unisys is in the market for strategic partnerships as already forged deals with chip makers Intel Corp. and Motorola Inc. If Unruh can manage those partnerships as he has managed its costs, the deal would not stick.

By Joseph Weber in Philadelphia

FIDELITY BLUE CHIP GROWTH FUND

How to Buy into "Blue Chips" for \$2,500

People invest in "blue chip companies" when they're looking for the strength of some of today's largest, best known, and most successful corporations—stocks that have stood the test of time.

With Blue Chip Growth Fund. Fidelity offers you the opportunity to invest for growth from these blue chip companies. And, the Fund's strategy has gotten results as you can see from the chart.

If you're seeking an investment for long-term growth from stronger and more established corporations, Blue Chip Growth Fund may be worth your consideration. Minimum investment \$2,500, \$500 for IRAs.

It's easy to transfer your IRA. If you're looking for a new approach to investing for your retirement, consider moving your IRA to Fidelity. Call today for a Fidelity IRA Fact Kit and ask for your free copy of Fidelity's *Common Sense Guide to Planning for Retirement*.

**Average Annual
Total Returns as
of March 31, 1992***

16.53%
1 Year

19.35%
Life of Fund
12/31/87-3/31/92

**Visit a Fidelity Investor Center or Call 24 Hours
1-800-544-8888**



For more complete information, including management fees, expenses, and the Fund's 3% sales charge, please call or write for a free prospectus. Read it carefully before you invest or send money. *Average annual returns are historical and include change in share price, reinvestment of dividends and capital gains and the effect of the fund's 3% sales charge. You may have a gain or loss when you sell your shares. Fidelity Distributors Corporation
CODE: BW/BCF/060892

FOR AD RATES
AND INFORMATION
PHONE:
312 337-3090
OR WRITE:

BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Office Supplies Equipment

America's Lowest Priced Office Supplies Direct to You

**WHOLESALE
SUPPLY
Company**

Letter Size Pads Custom	Speed 11 pt. manila folders Letter size, 13 cut	3M Data cartridge, 60MB, 600' length	Panasonic 9-Pin Dot Matrix Printer
Order No: 811CPMCP \$2.99	Order No: 153LMD \$2.99	Order No: D600ATHM \$18.49	Order No: KAP180POA \$148.99

You simply won't find lower prices on brand name office supplies than at Wholesale Supply Company. Over 9,000 different items, same day shipping, and all at prices you have to see to believe. So call now for your free catalog.

1-800-962-9162

AD-100-0005

Sales Promotions Premiums

What Makes The Affini-T Shirt™ Different From All Other Shirts?

Personalization.

Our full-color design integrates it all: Corporate logo, event, name of T-shirt wearer — and more! It's one size fits all on 100% cotton. Perfect for events, meetings, trade shows, incentives, awards, and premiums. For pricing call 1 (800) 772-8277, fax 1 (201) 617-5606

No two shirts are alike!

The Affini-T Shirt™ One Harmon Place
Secaucus, NJ 07094 Affini-T Corporate Shirts



Office Supplies Equipment

DRAWINGS at your FINGERTIPS in SECONDS



KINGFILE

STORES UP TO
1000 DRAWINGS
Available in 1/4" increments, 1/2" increments, 1" increments, 2" increments, 4" increments, 8" increments, 16" increments, 32" increments, 64" increments, 128" increments, 256" increments, 512" increments, 1024" increments, 2048" increments, 4096" increments, 8192" increments, 16384" increments, 32768" increments, 65536" increments, 131072" increments, 262144" increments, 524288" increments, 1048576" increments, 2097152" increments, 4194304" increments, 8388608" increments, 16777216" increments, 33554432" increments, 67108864" increments, 134217728" increments, 268435456" increments, 536870912" increments, 1073741824" increments, 2147483648" increments, 4294967296" increments, 8589934592" increments, 17179869184" increments, 34359738368" increments, 68719476736" increments, 137438953472" increments, 274877906944" increments, 549755813888" increments, 1099511627776" increments, 2199023255552" increments, 4398046511104" increments, 8796093022208" increments, 17592186044416" increments, 35184372088832" increments, 70368744177664" increments, 140737488355328" increments, 281474976710656" increments, 562949953421312" increments, 1125899906842624" increments, 2251799813685248" increments, 4503599627370496" increments, 9007199254740992" increments, 18014398509481984" increments, 36028797018963968" increments, 72057594037927936" increments, 144115188075855872" increments, 288230376151711744" increments, 576460752303423488" increments, 1152921504606846976" increments, 2305843009213693952" increments, 4611686018427387904" increments, 9223372036854775808" increments, 18446744073709551616" increments, 36893488147419103232" increments, 73786976294838206464" increments, 147573952589676412928" increments, 295147905179352825856" increments, 590295810358705651712" increments, 1180591620717411303424" increments, 2361183241434822606848" increments, 4722366482869645213696" increments, 9444732965739290427392" increments, 18889465931478580854784" increments, 37778931862957161709568" increments, 75557863725914323419136" increments, 151115727451828646838272" increments, 302231454903657293676544" increments, 604462909807314587353088" increments, 1208925819614629174706176" increments, 2417851639229258349412352" increments, 4835703278458516698824704" increments, 9671406556917033397649408" increments, 19342813113834066795298816" increments, 38685626227668133590597632" increments, 77371252455336267181195264" increments, 154742504910672534362390528" increments, 309485009821345068724781056" increments, 618970019642690137449562112" increments, 1237940039285380274899124224" increments, 2475880078570760549798248448" increments, 4951760157141521099596496896" increments, 9903520314283042199192993792" increments, 19807040628566084398385987584" increments, 39614081257132168796771975168" increments, 79228162514264337593543950336" increments, 158456325028528675187087900672" increments, 316912650057057350374175801344" increments, 633825300114114700748351602688" increments, 1267650600228229401496703205376" increments, 2535301200456458802993406410752" increments, 5070602400912917605986812821504" increments, 10141204801825835211973625643008" increments, 20282409603651670423947251286016" increments, 40564819207303340847894502572032" increments, 81129638414606681695789005144064" increments, 162259276829213363391578010288128" increments, 324518553658426726783156020576256" increments, 649037107316853453566312041152512" increments, 1298074214633706907132624082305024" increments, 2596148429267413814265248164610048" increments, 5192296858534827628530496329220096" increments, 10384593717069655257060992658440192" increments, 20769187434139310514121985316880384" increments, 41538374868278621028243970633760768" increments, 83076749736557242056487941267521536" increments, 166153499473114484112975882535043072" increments, 332306998946228968225951765070086144" increments, 664613997892457936451903530140172288" increments, 1329227995784915872903807060280344576" increments, 2658455991569831745807614120560689152" increments, 5316911983139663491615228241121378304" increments, 10633823966279326983230456482242756608" increments, 21267647932558653966460912964485513216" increments, 42535295865117307932921825928971026432" increments, 85070591730234615865843651857942052864" increments, 170141183460469231731687303715884105728" increments, 340282366920938463463374607431768211456" increments, 680564733841876926926749214863536422912" increments, 1361129467683753853853498429727072845824" increments, 2722258935367507707706996859454145691648" increments, 5444517870735015415413993718908291383296" increments, 10889035741470030830827987437816582766592" increments, 21778071482940061661655974875633165533184" increments, 43556142965880123323311949751266331066368" increments, 87112285931760246646623899502532662132736" increments, 174224571863520493293247799005065324265472" increments, 348449143727040986586495598010130648530944" increments, 696898287454081973172991196020261297061888" increments, 1393796574908163946345982392040522594123776" increments, 2787593149816327892691964784081045188247552" increments, 5575186299632655785383929568162090376495104" increments, 11150372599265311570767859136324180752990208" increments, 22300745198530623141535718272648361505980416" increments, 44601490397061246283071436545296723011960832" increments, 89202980794122492566142873090593446023921664" increments, 178405961588244985132285746181186892047843328" increments, 356811923176489970264571492362373784095686656" increments, 713623846352979940529142984724747568191373312" increments, 1427247692705959881058285969449495136382746624" increments, 2854495385411919762116571938898990272765493248" increments, 5708990770823839524233143877797980545530986496" increments, 11417981541647679048466287755595961091061972992" increments, 22835963083295358096932575511191922182123945984" increments, 45671926166590716193865151022383844364247891968" increments, 91343852333181432387730302044767688728495783936" increments, 182687704666362864775460604089535377456991567872" increments, 365375409332725729550921208179070754913983135744" increments, 730750818665451459101842416358141509827966271488" increments, 1461501637330902918203684832716283019655932542976" increments, 2923003274661805836407369665432566039311865085952" increments, 5846006549323611672814739330865132078623730171904" increments, 11692013098647223345629478661730264157247460343808" increments, 23384026197294446691258957323460528314494920687616" increments, 46768052394588893382517914646921056628989841375232" increments, 93536104789177786765035829293842113257979682750464" increments, 187072209578355573530071658587684226515959365500928" increments, 374144419156711147060143317175368453031918731001856" increments, 748288838313422294120286634350736906063837462003712" increments, 1496577676626844588240573268701473812127674924007424" increments, 2993155353253689176481146537402947624255349848014848" increments, 5986310706507378352962293074805895248510699696029696" increments, 11972621413014756705924586149611790497021399392059392" increments, 23945242826029513411849172299223580994042798784118784" increments, 47890485652059026823698344598447161988085597568237568" increments, 95780971304118053647396689196894323976171195136475136" increments, 191561942608236107294793378393788647952342390272950272" increments, 383123885216472214589586756787577295904684780545900544" increments, 766247770432944429179173513575154591809369561091801088" increments, 1532495540865888858358347027150309183618739122183602176" increments, 3064991081731777716716694054300618367237478244367204352" increments, 6129982163463555433433388108601236734474956488734408704" increments, 12259964326927110866866776217202473468949912977468817408" increments, 24519928653854221733733552434404946937899825954937634816" increments, 49039857307708443467467104868809893875799651909875269632" increments, 98079714615416886934934209737619787751599303819750539264" increments, 196159429230833773869868419475239575503198607639501078528" increments, 392318858461667547739736838950479151006397215279002157056" increments, 784637716923335095479473677900958302012794430558004314112" increments, 1569275433846670190958947355801916604025588861116008628224" increments, 3138550867693340381917894711603833208051177722232017256448" increments, 6277101735386680763835789423207666416102355444464034512896" increments, 12554203470773361527671578846415332832204710888928069025792" increments, 25108406941546723055343157692830665664409421777856138051584" increments, 50216813883093446110686315385661331328818843555712276103168" increments, 100433627766186892221372630771322662657637687111424552206336" increments, 200867255532373784442745261542645325315275374222849104412672" increments, 401734511064747568885490523085290650630550748445698208825344" increments, 803469022129495137770981046170581301261101496891396417650688" increments, 1606938044258990275541962092341162602522202993782792835301376" increments, 3213876088517980551083924184682325205044405987565585670602752" increments, 6427752177035961102167848369364650410088811975131171341205504" increments, 12855504354071922204335696738729300820177623950262342682411008" increments, 25711008708143844408671393477458601640355247900524685364822016" increments, 51422017416287688817342786954917203280710495801049370729644032" increments, 102844034832575377634685573909834406561420991602098741459288064" increments, 205688069665150755269371147819668813122841983204197482918576128" increments, 411376139330301510538742295639337626245683966408394965837152256" increments, 822752278660603021077484591278675252491367932816789931674304512" increments, 1645504557321206042154969182557350504982735865633579863348609024" increments, 3291009114642412084309938365114701009965471731267159726697218048" increments, 6582018229284824168619876730229402019930943462534319453394436096" increments, 13164036458569648337239753460458804039861886925068638906788872192" increments, 26328072917139296674479506920917608079723773850137277813577744384" increments, 52656145834278593348959013841835216159447547700274555627155488768" increments, 105312291668557186697918027683670432318895095400549111254310975536" increments, 210624583337114373395836055367340864637790190801098222508621951072" increments, 421249166674228746791672110734681729275580381602196445017243902144" increments, 842498333348457493583344221469363458551160763204392890034487804288" increments, 1684996666696914987166688442938726917102321526408785780068975608576" increments, 3369993333393829974333376885877453834204643052817571560137951217152" increments, 6739986666787659948666753771754907668409286105635143120275902434304" increments, 13479973333575319897333507543509815336818572211270286240551804868608" increments, 26959946667150639794667015087019630673637144422540572481103609737216" increments, 53919893334301279589334030174039261347274288845081144962207219474432" increments, 107839786668602559178668060348078522694548577690162289924414439548864" increments, 215679573337205118357336120696157045389097155380324579848828879097728" increments, 431359146674410236714672241392314090778194310760649159697657758195456" increments, 862718293348820473429344482784628181556388621521298319395315516390912" increments, 1725436586697640946858688965569256363112777243042596638790631032781824" increments, 3450873173395281893717377931138512726225554486085193277581262065563648" increments, 6901746346790563787434755862277025452451108972170386555162524131127296" increments, 13803492693581127574869511724554050904902217944340773110325048262254592" increments, 2760698538716225514973902344910810180980443588868154622065009652450912" increments, 5521397077432451029947804689821620361960887177736309244130019304901824" increments, 11042794154864902059895609379643240723921774355472618488260038609803648" increments, 22085588309729804119791218759286481447843548710945236976520077219607296" increments, 44171176619459608239582437518572962895687097421890473953040154439214592" increments, 88342353238919216479164875037145925791374194843780947906080308878429184" increments, 176684706477838432958329750074291851582748389687561895812160617756858368" increments, 353369412955676865916659500148583703165496779375123791624321235513716736" increments, 706738825911353731833319000297167406330993558750247583248642471027433472" increments, 1413477651822707463666638000594334812661987117500495166497284942054866944" increments, 2826955303645414927333276001188669625323974235000990332994569884109733888" increments, 5653910607290829854666552002377339250647948470001980665989139768219467776" increments, 11307821214581659709333104004754678501295896940003961331978279536438935552" increments, 22615642429163319418666208009509357002591793880007922663956559072877871104" increments, 45231284858326638837332416019018714005183587760015845327913118145755742208" increments, 90462569716653277674664832038037428010367175520031690655826236291511484416" increments, 180925139433306555349329664076074856020734351040063381311652472583022968832" increments, 361850278866613110698659328152149712041468702080126762623304945166045937664" increments, 723700557733226221397318656304299424082937404160253525246609890332091875328" increments, 1447401115466452442794637312608598848165874808320507050493219780664183750656" increments, 2894802230932904885589274625217197696331749616641014100986439561328367501312" increments, 578960446186580977117854925043439539266349923328202820197287912265673

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Tobacco Products

AMERICAN SPIRIT



AMERICAN
SPIRIT
natural
tobacco and
cigarettes.
100% free of
chemical
additives.
If you have wanted
to stop smoking
but could not,
or if you
smoke out of

voice rather than habit... Here is an
alternative you should at least try. By sending
2 for samples, I certify that I am of legal age
purchase tobacco products, and you will
find me one pack each filter and non-filter
cigarettes and one pouch of loose tobacco.
XB 1840, Sample Request Department BWK1,
P.O. Box 87504.
C/V (800) 332-5595.

SURGEON GENERAL'S WARNING:
Quitting Smoking Now Greatly
Reduces Serious Risks to Your Health

Menswear/Fashion

EN'S WIDE SHOES

-EEEEEE, SIZES 5-13
a width for men who need it.
Excellent variety, styling and quality.
d for **FREE**
ALOG



Widest Selection of the Widest Shoes Anywhere!

TCHCOCK SHOES, INC
Dept. 55E Hingham, MA 02043

Business Opportunities

PERSONALIZED CHILDREN'S BOOKS
Turn a small investment into that
fitable full or part time business you
have always dreamed about!

excellent home operated business!
ks sell fast in stores! At fairs! Parties!
s! Or mail order... anywhere there are
ple. It's easy to make \$4000 to \$8000
month making and selling our excit-
ing line of personalized books (for chil-
dren & grown-ups). Personalized audio
books and stationery available also.
CALL TODAY! (214) 248-9100
D & K ENTERPRISES, INC.
3216 Commander Drive, Suite 101
Dept. 21
Carrollton, Texas 75006

**You had acquired territorial
distribution rights in the '80's
for Lotus or WordPerfect-**

I would YOU be worth now?

**have a similar opportunity in
emerging software category.**
10-521-3279 • Norick Software

OUR OWN BUSINESS NO RISK.

**E Information. Start a profitable
e scholarship matching business
out experience or capital.**

00-365-8700 ext. 636

Financial Services

BIG-NAME STOCKS TO UNLOAD NOW:

My new Performance
Ratings of all NYSE
stocks show 200 ex-
tremely vulnerable
stocks (rated 8 or 9)
-including some very
famous names -
which I believe could
"take a bath." I'll rush
you the Performance
Ratings (\$45 value) as a bonus with
your subscription to *The Zweig Fore-*
cast. Time is crucial.



MARTIN ZWIG

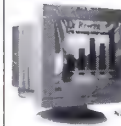
Three-Month Trial \$55.
One Year \$265. Visa or MC
1-800-535-9649 Ext. 9024.
THE ZWIG FORECAST
P.O. Box 2900, Wantagh, NY 11793-0926

Mastercard/Visa Rates as low as
8.50%, some with no annual fee,
minimum credit requirement,
offered nationally! For current
list of Banks, send \$5 to:

United Association
Dept. B
P.O. Box 425
Jamaica, NY 11413

Computers

NEC MultiSync FG Color Display Solutions



- IBM PC/MS-DOS and Mac
compatible
- AccuColor Control System allows
you to adjust on-screen colors to
meet your individual needs and
preferences.
- TWO Year Warranty

MultiSync 3FGx (15") \$629
MultiSync 4FG (15" with AccuColor) \$749
MultiSync 5FG (17" with AccuColor) \$1339
MultiSync 6FG (21" with AccuColor) \$2769

PRS

7 Music
Irvine, CA 92718

Pacific Business Systems

(714) 768-8114

Business Software

Are You Starting or Running a Business?

Then you need this Business Software Bundle
Three Quality Software Programs
• Spinnaker PFS Integrated Software
(5 features)
• Spinnaker PFS Desktop Publishing
• Peachtree Accounting Software
PLUS a **FREE** bonus software gift.

All for only \$269.
Regular retail price \$416. Available in DOS
or Windows versions. Call or fax for info:

Phone: (800) 257-0073, ext 103
Fax: (301) 459-3776, Dept. 103

ARSoftware Corporation
8201 Corporate Drive, Suite 1110
Landover, MD 20785 • (301) 459-3773

Travel

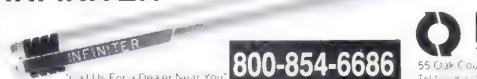
CULTURAL TOURS OF TURKEY

Best of the Greek and Roman
civilizations are in Turkey. We
stress culture and history.

1-800-448-0515

Presentation Equipment

The most advanced pen sized
Laser Pointer
INFINITER



\$92

Plus Tax, \$5.00 S&H

ALPEC
55 Oak Court, Danville, CA 94526
Tel: (916) 392-1111
VISA

800-854-6686

Computers

HIGH PERFORMANCE AT BIG SAVINGS!!! Everyday Lowest Prices in the U.S.A. The UNIVERSAL COMPUTER Difference!

386 SX25 \$ 899
386 DX40 \$ 999
486 DX33 \$1399

**WE
EXPORT!**

ALL MODELS:

- 14" H/R Monitor
- 1MB RAM
- 42 MB HD
- 3.5" & 5.25" FDs
- 101 Enhanced AT KB
- DOS 5.0

- Windows w/Mouse
- One Year Guarantee
- 45 day Refund Policy
- Satisfaction Guaranteed
- Credit Cards:
AMEX, VISA, MC



UNIVERSAL COMPUTER

4401 PONCE DE LEON BLVD., CORAL GABLES, FL 33146, U.S.A.
CALL 1 (800) 457-4433 (305) 446-9905 FAX: (305) 446-9928

MUST LIQUIDATE!

14¢ On The Dollar!

IBM® XT with Monitor

Includes one of America's
most popular and easiest
to use integrated software
packages, already loaded
on the hard drive for you!
Handles database
management, word
processing, reports and
spreadsheets!

**10 MB
HARD DRIVE!**

**Original List if New
\$2895.00**

OUT THEY GO!

\$398

Plus \$24 S/H each
Item #C5409-8441



**IBM COLOR
MONITOR!**

- Genuine IBM Quality!
- IBM Color Monitor
Included!
- 640K RAM!
- 10MB Hard Drive!
- 360K 5.25" Floppy Drive!
- 8088 / 4.77 MHz
Processor!
- Software already loaded
on the hard drive for you!

- Standard XT Keyboard!
- Serial Port!
- Parallel Port!
- Color Graphics Adapter!
- 800# for technical
assistance!
- Ready to use! Includes
everything you need to get
started!
- 100% Refurbished by Exsell!
- 90 Day Limited Warranty!

COMB
AUTHORIZED LIQUIDATORS

COMB CORP.
720 Anderson Avenue
St. Cloud, MN 56395

1-800-522-3035

Segment #4128302

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET-PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Corporate Gifts

100% Cotton/Your Logo! — Better Than Lacoste or Ralph Lauren!



Our 100% Cotton, American Made polo shirts, custom embroidered with your logo are such good quality, we unequivocally and unconditionally guarantee them for an indefinite period of time! Free shipping for international orders. For a price list and catalogue please call:

1-800-847-4478

Fax 1-718-782-4614

The Queensboro Shirt Company
Dept BW 26, 119 N 11th St., Greenpoint, NY 11211

Newsletters/Periodicals



PRACTICAL PRESENTATIONS

The How-To Newsletter
For Business Presenters

Call for free sample issue: (619) 934-9692
or write to C&M Communications,
P.O. Box 3235, Mammoth Lakes, CA 93546

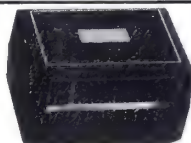
Corporate Gifts

"Chicago's Own Gift Shop"
at Here's Chicago!
T-Shirts/Caps/Sweats
Cubs/Bulls/Bears/Sox/Hawks
- Gangster Memorabilia -
Videos - Books

1-800/428-8557

Shipped anywhere in U.S.

Corporate Gifts



Check*Mate™

The Unique,
Desktop Checkwriter

Give your checks an impressive
professional look!

- Easy to operate
- Clearly prints amount of check in two colors
- Available in decorator colors
- Includes name plate for engraving
- Protects your checks
- Personal or business checks
- Dimensions 6" x 4 1/2" x 2 7/8"
- Ideal gift or premium
- Made in U.S.A.

To order send \$39.95 + \$3.95 S/H Check or Money Order (CA res. add. tax) to:

Effective Products, Int'l.

P.O. Box 6010-777, Sherman Oaks, CA 91413

1-800-786-1597

30 day moneyback guarantee • Mastercard/Visa Accepted
Specify color: Black/Gold, Burgundy/Gold or Black/Silver

CORPORATE TIES

(150 pc. minimum)

Gain recognition from
neckties customized
with company logo.

Free literature upon request.



BARNARD-MAINE LTD.

33 Mead Ave. • Cos Cob

CT 06807 • U.S.A.

Dept. BW

(203) 869-3006

IMAGE BUILDERS

PROMOTE YOUR BUSINESS...
EVERYDAY LOW PRICES ON...



IMPRINTED
COFFEE MUGS
AS LOW AS
\$1.29

32 OZ SPORT
BOTTLES AS
LOW AS
\$1.19

EMBROIDERED
CAPS AS
LOW AS
\$4.45

YOUR
LOGO
HERE

CHOOSE FROM
HUNDREDS OF ITEMS.

CALL FOR FREE CATALOG

1-800-792-2277

FAX 1-510-786-1111

THE CORPORATE CHOICE

JAMEE WEST®
LOGO
WATCH

24 HRS.

advertisement

Can you imagine a full color
company logo or any artistic
design on our elegant watch?
Anything is possible! Just
send us your company logo,
artwork or photo and we will
transform it on our exquisite
watch. Deluxe/Standard
watch with precision quartz
movements, leather strap
plus 1 year warranty.

Please send us \$15.95

(Lmt. 2 sample/company)

JAMEE WEST® LOGO WATCH

9816 GARDEN GROVE BLVD.

GARDEN GROVE, CA 92644

FAX 714-534-4673

1-800-635-2633

CUSTOM MADE TIES

MINIMUM 150

SCARVES

MINIMUM 100

BLAZER CRESTS

MINIMUM 12

FOR CORPORATE
CLUB & SCHOOL USE

THE LEAST
EXPENSIVE
INVESTMENT IN
PUBLIC RELATIONS
YOU COULD
EVER MAKE.



alynn
NECKWEAR

108 DOGWOOD CT., STAMFORD, CT 06903

800-252-5966 • 203-322-4142

Business Services

RESEARCH REPORTS

19,278 academic topics available
Send \$2.00 for the 272-page catalog
Custom-written reports also available

RESEARCH ASSISTANCE

11322 Idaho Ave., #206BF,

Los Angeles, CA 90025

Toll Free Hotline: 800-351-0222
(California: 310-477-8226)

NEED A NEWSLETTER?

Our one-stop design, printing and
mailing service makes it easy.

Hundreds of satisfied customers nationwide

Free info/prices: (800) 359-5993

OUTSIDE U.S. (904) 386-3282 DATA EXPRESS INC.

DELAWARE INCORPORATION INSTANTLY, \$95. Free Delaware

Incorporation Handbook. De-

ware Business Incorporation

Inc., Box 5722, Dep't. BV

Wilmington, DE 19808. TO:

FREE 1-800-423-2993 or 301-

996-5819 or FAX 1-800-423-

0423. VISA / MC / AMEX.

INCORPORATE IN JUST 8 MINUTES!

IT'S EASY. . . Form a corporation
over the phone without a lawyer.

The Company Corporation

1-800-542-2677 ext. A405

IT PAYS TO ADVERTISE IN THE BUSINESS WEEK MARKET-PLACE

The Business Week
Market-Place Section is
special advertising feature
appearing in the first issue
of each month. The Marke-
Place provides an idea
'Showcase' for advertiser
who have products or ser-
vices that appeal to Bus-
ness Week's more than 6
million responsive readers.

For rates and information
write:

BUSINESS WEEK
MARKET-PLACE

100 East Ohio St., Suite 632

Chicago, IL 60611

or call (312) 337-3090

or FAX (312) 337-5633

Developments to Watch

BY WILLIAM D. MARBACH

MORE ITCHIN' AND A-SCRATCHIN' WHEN POISON IVY COMES AROUND?



Poison ivy may not be a hazard of summer much longer. At the University of Mississippi, researchers have developed a once-a-year treatment that could prevent or reduce the allergic reaction to poison ivy, poison oak, and sumac. For those not protected, a single dose might diminish the symptoms when a rash appears.

A rash is caused by an immune response to an oily mixture of compounds, called urushols, found on the leaves of the irritating plants. Mahmoud A. El Sohly and E. Sue Watson, now at Rust College in Holly Springs, Miss., synthesized a less toxic form of the molecules that, when injected, actively desensitizes a person to poison ivy and its cousins. Miss—which forecasts a market of at least \$200 million annually—has licensed the drug to Stiefel Laboratories Inc. in Gables, Fla. The dermatologics company hopes to begin trials within a year.

P 'SANDWICHES' FOR SMALLER, FASTER TRANSISTORS

It may seem as if semiconductor engineers would like to reduce everything to digital code, the language of ones and zeros, and that computers use. Chips using analog, or wavelike, signals are far less common. But analog chipmaking is staging a comeback—and specialists such as Harris Corp. in Melbourne, Fla., may help solve a looming technological problem. Engineers shrink circuitry to design ever-faster digital chips, but they are running up against physical limits. The tiny transistors needed for tomorrow's designs may "leak" so much power that the chips won't work properly. One solution would be to put more insulation around the transistors, but that would limit further downsizing—and speed. Harris has a clever alternative: Glue two semiconductor chips together and use the extra thickness to embed tall, thin transistors in the middle of the sandwich. It isn't easy. Engineers tried—unsuccessfully—to bond wafers in the mid-1980s. After five years of work, Harris has a process that turns out speedy yet low-power circuits. It can combine both analog and digital circuits on the same hybrid chip. Harris expects chips to show up in high-speed communications gear, test workstations, ultrafast computer disk drives, and powerful medical imaging systems.

MAKES A TOUGH TITANIUM HELPER A SPACE PLANE SOAR

Building the so-called National AeroSpace Plane (NASP), a craft designed to take off from an airfield and fly directly to orbit, will be a daunting challenge. The rocket plane will be subjected to intense heat and pressure as it hurtles through the atmosphere into orbit or returns to earth. So, a subsidiary

of Textron Inc. in Lowell, Mass., has developed a lightweight, high-strength, titanium-matrix composite that will be used for the frame, wings, and fuselage of the NASP.

The material—silicon-carbide fibers wrapped in titanium—is twice as stiff, 50% stronger, and twice as resistant to very high temperatures as titanium alone, says Paul R. Hoffman, president of Textron's Specialty Materials Div. The composite will also reduce the weight of the NASP. That's a key consideration for the U.S. Air Force and NASA, which hope the craft—still in the research phase—will fly by the year 2000. Hoffman estimates that other uses for the composite, such as aircraft turbine engines and landing gears, will spawn an annual market of \$100 million.

IN THIS BOUDOIR, YOU CAN SHAPE UP IN YOUR SLEEP

How do you raise your fitness level without moving a muscle? Try sleeping in an ingenious bedchamber invented by chemical engineer Igor Gamow of the University of Colorado. The fiberglass "high-altitude" compartment, 31 inches in diameter, has a pump that lowers the air pressure enough to simulate altitudes of up to 18,000 feet.

The body produces more blood cells at high altitudes, making it easier to run marathons or climb mountains. Studies in France and Japan show this occurs when people are at high altitudes for as little as four hours a day. So, some athletes train at sea level, where higher oxygen levels permit a more intense workout, then drive up nearby mountains at night.

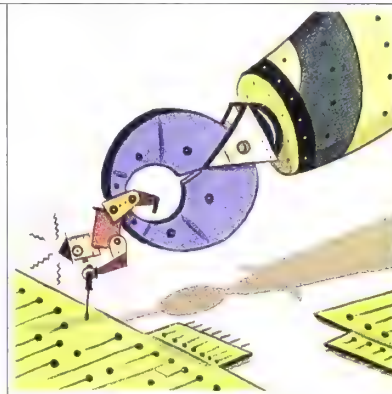
With Gamow's invention, they won't have to commute. They train at sea level, then sleep at "high altitude"—not to get acclimatized but merely to stimulate the body to make more EPO, the hormone that causes blood-cell production. Gamow plans to market the \$8,000-to-\$10,000 chamber this fall—equipped, he says, with a custom mattress, a pillow, and "beautiful red sheets."

IBM'S ITSY-BITSY ROBOT HAS A DEFT TOUCH

Large robots are more familiar, but there's a big need for miniature machines capable of precisely positioning such things as electrical circuits. IBM has unveiled a micro-robot more than 100 times as sensitive as the typical industrial robot.

Called a "fine positioner," the robot is 4 inches by 5 inches, and 2 inches thick. Instead of gears, motors, and bearings, it has just one moving part, a metal plate that glides frictionlessly on a layer of compressed air. A computer-controlled electromagnetic field guides the plate's movements. This micro-robot fits on the end of a conventional robot's arm and works to a precision of two-tenths of a thousandth of a millimeter, or 0.2 micron.

Developed at IBM's Thomas J. Watson Research Center in Yorktown Heights, N.Y., the micro-robot is being tested at several manufacturing sites for such tasks as positioning circuitry and computer chips. IBM plans to gear up for industrial use by early 1993.



ONE STEPPER FORWARD FOR SEMATECH

A new chipmaking tool looks like the consortium's first winner

The revival has been five years in the making, but the U.S. may finally be about to retake some ground in the technological war with Japan. Back in 1987, 14 U.S. electronics companies formed the Sematech consortium and vowed to restore America's competitiveness in the esoteric equipment used to make integrated circuits. On June 15, one key product of Sematech's initiative will be unveiled by Silicon Valley Group Lithography Systems Inc. (SVGL) in Wilton, Conn. Its new tool for "printing" millions of transistors on microchips shows promise of surpassing

backer, plans to buy dozens of Micrascan for making 64-megabit chips, which could start production trials by late next year. Industry sources expect Toshiba Corp., a leading supplier of memory chips, to place an order as well.

The Micrascan isn't the only sign of a U.S. rebound in this pivotal technology. GCA Corp. in Andover, Mass., has also developed advanced circuit-printing tools with Sematech's help, and it recently logged a major order from Digital Equipment Corp. And Ultratech Stepper Inc. in Santa Clara, Calif., is working on technology for 256-megabit chips. "We

picked Nikon Corp. and Canon Inc. to develop better systems. Just as the Japanese were doing that, the U.S. promptly dropped the ball. An executive at Canon, No. 2 in the world in 1980, admits that it failed to keep pace and alienated customers with poor reliability and service. Canon soon fell off the top-10 chart.

Meanwhile, Perkin-Elmer Corp. of Norwalk, Conn., No. 1 in 1980, made the crucial move away from older circuit-printing machines. By 1988, PE plummeted to No. 8 in the world, and management despaired of making a comeback of a high-risk innovation being developed with IBM's help. So in early 1989, it put its lithography unit up for sale. When Nikon emerged as the only serious suitor, U.S. electronics companies rallied to the flag. The Bush Administration urged PE's chairman to find a U.S. buyer. As Nikon retreated, Silicon Valley Group Inc., then a \$131 million supplier of other wafer-processing equipment, stepped in. With IBM's help, it got PE to settle for a fraction of its \$100 million asking price—\$28 million—

OLD VS. NEW

STEPPER

Light is projected through a stencil-like mask of a chip's circuitry onto a silicon wafer. Each exposure "burns in" the pattern for two or three of the scores of chips that will be made from the wafer. Then the wafer moves, or "steps," for the next exposure

STEP & SCAN

A step-and-scan method "prints" a much larger area, making it cheaper to produce finer circuit lines for faster chips. The mask moves between a lens and a light, scanning the chip pattern and projecting it onto the wafer, which also moves. Then the wafer shifts for the next strip exposure

everything the Japanese offer. "We have a technology that will bring superiority back to the U.S.," declares Robert Virgalla, an SVGL marketing manager.

Called Micrascan II and developed partly with Sematech funding, the SVGL machine is already winning plaudits from analysts and potential customers. "It's one of the few technologies that can take us to the 256-megabit chip," says Jerry D. Hutcheson, chief executive officer of VLSI Research Inc., a San Jose (Calif.) consultancy. Computer memory chips that hold 256 million bits of data—roughly the text in 200 issues of this magazine—should show up around 1997. Well before then, IBM, another SVGL

are starting to see American products that can compete with the Japanese," says Peggy Wood, who follows semiconductor equipment for market researcher Dataquest Inc.

STAYING AMERICAN. There's a lot of territory to recover before Sematech can be judged a success. But this experiment with industrial policy, which has been costing taxpayers \$100 million a year in matching funds, is looking like an antidote to earlier efforts by Japan's Ministry of International Trade & Industry. Until the early 1980s, U.S. companies dominated the market for hardware used to etch ever-thinner circuit lines on silicon wafers. But by then, MITI had

a 20% share in a new company, SEMATECH.

At first glance, the fuss seemed out of proportion. The U.S. market for all micro lithographic gear was only \$314 million last year. But it's a critical link in the technological food chain of the \$300 billion semiconductor industry, which in turn supports the \$310 billion U.S. electronics industry. IBM and other heavyweights worried that if Japan cornered the lithography business, its chipmakers might get dibs on new steppers, and today's chip-printing machines are obsolete. Then they could give their competitors the edge in making the next generation of microvisions chips that would hand Japanese computers a cost or performance edge.

This could still happen. SVGL and GCA

FREE INFORMATION FOR READERS OF **BusinessWeek**

Want more information about advertisers in this issue?

If so...

1. Review the list of advertisers below.
2. Circle the corresponding number on the postage-paid reader service card, complete the necessary information and drop in the mail.
3. Or, call toll-free Monday—Friday 8AM—5PM MST:

1-800-345-3550

When prompted, use keypad to enter this control number **8299600***

ANNUAL REPORTS

1. Southwestern Bell Corporation

FINANCIAL PRODUCTS AND SERVICES

2. CIGNA Corporation

PRODUCTS/SERVICES

3. A.T. Cross Company
4. Advanced Logic Research
5. American Medical Association
6. Amoco Chemical Company
7. Buick Motor Division
8. Canon CJ10 Color Copier, Printer, Scanner
9. CompuAdd

10. Danfoss, Inc.
11. Delta Airlines
12. Fujitsu Network Transmission Systems, Inc.
13. Hotel Lotte
14. Intergraph Corporation
15. International Institute of Management Development - IMD
16. The AT&T Corporate Calling Card
17. Trafalgar House
18. Unisys

AREA DEVELOPMENT

19. Fairfax County Economic Development Authority
20. Iowa Department of Economic Development

are dwarfs compared with Nikon and Canon. Of the 679 steppers shipped last year, at \$1 million to \$4 million each, more than 80% were Japanese-made, according to Dataquest. Advanced Semiconductor Materials Inc. (ASM), a Dutch supplier partly owned by Philips, had a 6% share. By comparison, SVGL shipped just eight of its first-generation Micrascan units, which enjoy only a small advantage over the Japanese. Chipmakers such as Intel Corp. and Motorola Inc. are evaluating the latest model but wonder if it can match Japanese reliability. U.S. companies "are back in the running," says Howard I. High, an Intel spokesman. "But they aren't at a point where we're ready to buy."

SPLITTING HAIRS. A stepper fabricates tiny chips with millions of transistors, making it perhaps the most exacting factory tool ever. It shines light through a mask, or stencil, of the circuit pattern to imprint the image on a photosensitive layer covering a silicon wafer. Then the wafer is moved one step ahead—hence, the name "stepper"—to print the next group of chips. Current steppers can print circuit lines at least as thin as 0.8 micron, or 1/25 the diameter of a human hair. That's fine for 4-megabit memory chips. However, the 16-megabit chips now coming to market require shrinking the circuit lines to 0.6 micron or less, and 64-megabit memories will need lines slimmer than 0.4 micron.

To pass the Japanese, Perkin-Elmer planned to marry steppers with an earlier technology, the scanner. Instead of exposing circuits with one flash, a light source scans a moving mask (diagram, page 110). This approach has a 50%-plus larger "field of view," so three chips typically can be printed with each exposure, vs. two with a stepper. The higher output saves money. And an innovative new light source,



SEMATECH LITHOGRAPHY CHIEF McMILLAN: CHALLENGING JAPANESE DOMINANCE

called "deep-deep ultraviolet," promises to shrink step-and-scan line widths to below 0.25 micron, the target for 256-megabit memories.

Building such a machine presented major problems. Especially tough was keeping the light beam in tight focus. When PE threw in the towel, IBM, which long ago stopped making its own chip-making equipment, wasn't willing to tackle the job alone. Papken S. Der Torossian, chairman of SVG and a passionate advocate of keeping American innovations in the U.S., stepped forward. But he didn't agree to proceed until IBM promised to buy 19 first-generation machines for \$76 million. "The major hurdle was convincing SVG that this could be a money-making proposition," says Michael J. Attardo, Big Blue's chief of semiconductor manufacturing.

The deal took five months to structure and nearly collapsed many times, recalls Der Torossian. Eventually, IBM also agreed to pay \$20 million for research and development, and Sematech added \$20 million more. In late 1990, the Defense Advanced Research Projects Agency tapped SVGL for a project whose aim is etching even finer lines. Says David C. Shaver, head of the effort at Massachusetts Institute of Technology's Lincoln Laboratory: "DARPA wants this industry healthy."

they make IBM's leading-edge 16-megabit memory chips and are being pushed to 0.4 micron to fashion prototypes of 64-megabit chips. Another machine in Sematech, where it's being sized up by engineers from companies such as Te Instruments Inc. and Motorola. Last year, Toshiba bought the only unit sold to a non-U.S. company. Now, SVGL is gearing up to produce the Micrascan, which provides 0.35-micron lines. At the DARPA-funded project is successful, the next SVGL machine will reach 0.5 micron.

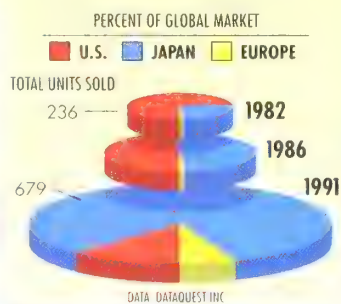
BIG YEAR. Such performance catapulted the U.S. back into the technology lead, though Nikon and Canon officials note that only IBM has placed many orders. The Japanese also say it may be forever for GCA, which now offers 0.35-micron stepper, to live down its take-ridden past. And they say it will take five years before chipmakers need lines below 0.35 micron, vs. the 0.5 that the Japanese now achieve. By then, Nikon and Canon will be ready, too.

Talk like this reminds the Americans of their own mistakes. "If the Japanese don't take this competition seriously, they'll be on the path to losing market share," declares Gordon B. McMillan, Sematech's lithography chief. He expects the next 12 months as pivotal. That's when big producers will begin ordering equipment for their "sub-half-micron" chips. Sematech is trying to provide Intel, Motorola, and other prospective customers that the new U.S. tools are as reliable as they are innovative. If it succeeds, then one key U.S. industry—with a little help from taxpayers—may stand up to the Japanese juggernaut.

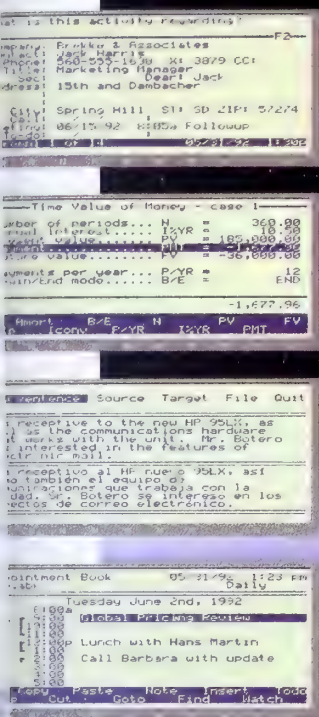
By John Carey in Washington, with David Port in New York

AMERICA'S DECLINE IN STEPPERS

Steppers are the ultrasophisticated machines that 'print' integrated circuits on silicon. For a decade, the U.S. has been steadily losing market share to Japan and, recently, Europe



The HP 95LX palmtop PC.



Don't forget to pack your office.

Just because you're out of the office doesn't mean you have to be away from your critical business information. Now you can transfer your files and take them with you. With the HP 95LX. An MS-DOS® based computer that measures just 6.3" x 3.4" x 1" (closed).

The HP 95LX is packed with built-in software. Lotus® 1-2-3® lets you take your spreadsheets with you. Do "what ifs." And attend meetings with all the latest figures. Phone Book allows you to instantly access names, phone numbers and ad-

resses. Appointment Book lets you monitor your schedule. There's even Memo Editor. And, of course, a powerful HP financial calculator.

Dozens of optional applications are also available. For example, SkyStream receives messages wirelessly. Money Manager tracks monthly expenses. ACT! manages client data. Globalink translates languages. And IntelliLink interacts with Microsoft® Windows.

The HP 95LX applications reside in the 1-Mbyte ROM. There's up to 1-Mbyte RAM for *your* files. And

with the plug-in slot, plenty of software and memory can be added.

Call 800-443-1254, Dept. 29 for details and U.S. retailer locations. In Canada, call 800-387-3867. After all, you're going places.



**HEWLETT
PACKARD**

Microsoft and MS-DOS are U.S. registered trademarks of Microsoft Corporation. Lotus and 1-2-3 are U.S. registered trademarks of Lotus Development Corporation. ACT! is a product of Contact Software International Inc. SkyStream receiver is a product of SkyTel. Money Manager is a product of AutoMate Corporation. Globalink is a product of Globalink Inc. IntelliLink is a product of IntelliLink Inc. © 1992 Hewlett-Packard Company. 19-12-02A

IT'S TIME TO START CODDLING YOUR NEST EGG

When it comes to saving for retirement, most workers are in a coddling state. Some are not saving at all, while others are saving but not saving enough. And even those who are saving are often not saving in the most effective way. According to a new survey by Buck Consultants, a New York firm that tracks benefit trends, this is where experts see the most room for improvement.

The survey found that only 10% of workers are saving enough to replace their savings. But even after that, only 10% of workers are saving in the most effective way. According to a new survey by Buck Consultants, a New York firm that tracks benefit trends, this is where experts see the most room for improvement.

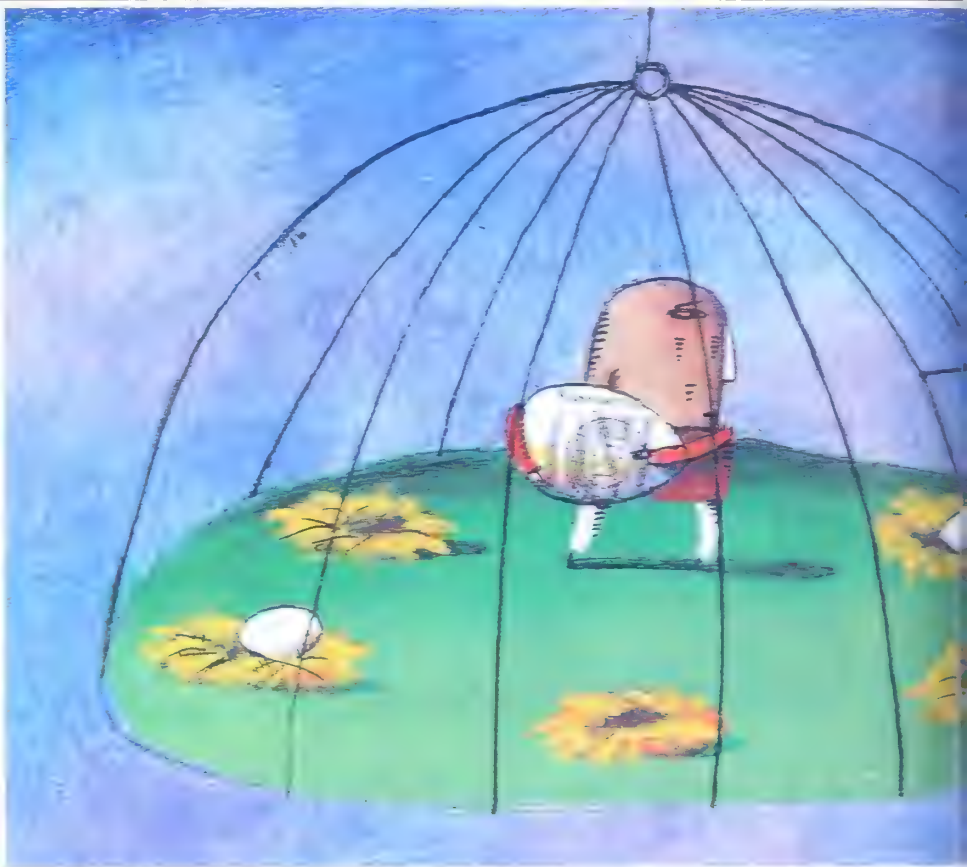
AMAZING. The typical plan's investment options are limited to a few funds, and the plan's investment options are limited to a few funds.

Lynch's Business Financial Services, calls a company's plan a "coddling" plan if it doesn't offer enough investment options or if it doesn't offer enough information to help workers make informed decisions about their savings.

Yet even if you have a "coddling" plan, there are still things you can do to improve it. According to Buck Consultants, a New York firm that tracks benefit trends, this is where experts see the most room for improvement.

plan's investment options and other features. For example, a "coddling" plan should offer at least 10 investment options, and it should offer a monthly statement starting at \$30.

Charles Sweeney, managing director at T. Rowe H. Associates, believes that workers are not saving enough, but he also believes that workers are not saving in the most effective way.



education about benefits programs is so poor that workers don't know to enroll. If you're lucky enough to work for an employer whose 401(k) plan is co-managed by a trust-and-true-benefits consultant or mutual-fund family, you're more likely to get the information you need. Putnam, for example, customizes a four-part brochure for its

participants in plans it helps administer that addresses issues such as the tax consequences of borrowing from your 401(k) funds for a downpayment on a house. And benefits consultant Towers Perrin offers a user-friendly software package that's customized for different types of plans and helps workers project the amount they'll need when

retire. Now they realize that a 401(k) plan could be a real asset. Many workers don't realize that, thank you very much.

ar-old who starts putting \$500 a month toward retirement will never catch up someone who began saving 100 a month at 30.

ET MENU. Even fewer employees have the knowhow to allocate their savings among a plan's various investment options without guidance. The variety of companies offer employees four choices—usually a money-market fund, a bond fund made up of insurer-unwritten guaranteed investment contracts (GICs), and a diversified equity fund that's tied to a stock index. Most employees put the bulk of their contributions into the option they believe is safe-

an average of 70% of their money into money-market or insurance options. "For a long-term investment strategy, that's way too much," he says. Fidelity makes sure its participants understand the concept of dollar-cost averaging: When you invest the same amount of money in stock on a regular basis, you lower your average cost of shares, because you're buying fewer when the market is up and more when it's down.

Sophisticated savers have a different frustration: the limited range of 401(k) investment options. Only a fraction of plans offer funds that include foreign equities or do-

A 401(k) plan can provide security—if employees learn to maximize savings

401(k) investment choices. One reason is last year's scare over insurer solvency, which prompted them to take a harder look at their "guaranteed" investment contracts. Another is low interest rates, which have depressed yields from money-market funds. And the government is about to finalize proposed Employee

panies now allow quarterly changes in investment allocation; a few allow them monthly. Towers Perrin has an interactive, 24-hour phone system that gives clients' employees daily fund valuations and lets them change their investment mix or savings level by Touch-Tone. The consultant believes that such electronic systems are the wave of the future, as plan participants demand more disclosure and control.

LOAN LIMIT. Another major concern for employees is their access to plan contributions. Withdrawals from the plan before age 59½ carry a 10% IRS penalty on top of income taxes, but a growing number of plans have loan provisions that let you tap funds before retirement without penalty. The government limits how much you can take out: It can't be more than half of your vested account. But companies vary widely on how little and how often you can borrow, the interest rate, and whether you pay the interest to yourself.

Plan sponsors in general want to discourage borrowing from 401(k) funds, because loans add to their administrative burden and work against the plans' purpose. Still, companies are realizing that omitting loan provisions—or keeping them secret—scares away participants who worry about locking up their money.

With all the shortcomings of 401(k) plans, would you be better off saving for retirement on your own? No way, say the pros. To beat the benefits of tax breaks and company matching, you'd have to be an investment genius. But if you think your plan needs improvement, you can lobby for change. That worked at companies such as Honeywell Inc. when employees found out that their GICs were underwritten by Executive Life. And if benefits officers don't come to you with information, go to them. Remember, companies are saving millions by abandoning the old-style pension. Now, your retirement security is in your hands. *Joan Warner*

WHAT THE PERFECT RETIREMENT PLAN WOULD OFFER

COMPANY PARTICIPATION

Match 100% of employee contributions up to a preset level and partial matching thereafter

LOAN PROVISIONS

Ability to borrow as little as \$500 and up to half of your vested account, without proving hardship. Borrowing costs tied to prime rate. Interest you pay goes back into your account

INVESTMENT OPTIONS

Broad range of fund types, from aggressive growth to cash equivalents, with varying risk levels and prospectuses for each one. Ability to change allocations at least monthly

DISCLOSURE

Daily access to information about fund performance. Frequent company-sponsored meetings or publications on fund management goals and any changes in risk based on market or industry news

EDUCATION

Thorough briefing on all of the above *before* you sign up, including guidelines on how much to save and which funds to choose depending on your age and salary. Persistent promotion of program with employees who didn't sign up

DATA: BW

or people only a few away from retirement, is that guarantee the plan make sense. But for savers who avoid the market give up rich returns because stocks historically outperform other investments over 10 years or more. Bert L. Reynolds, president of Fidelity Institutional Investment Services, says 401(k) participants stick

mestic growth stocks—even though financial planners agree that around 10% of a well-diversified portfolio should be in such securities. And some companies put a disproportionate amount of 401(k) equity funds into their own stock—a risky bet, unless you happen to work for the highflier of the decade.

Experts say companies are slowly beginning to expand

Retirement Income Security Act (ERISA) regulations that will require 401(k) plan sponsors to provide a menu of investment options that will satisfy a broad range of needs.

No such rules tell companies how often they have to let employees shift their investments around or change the amount they save. But here, too, the trend is toward greater flexibility. Most com-

Autos

THEY HUG THE ROAD—AND YOUR WALLET

Sports car imitators clog the road, but for the genuine article, check out the new Mazda RX-7 and Porsche 968. The RX-7 is a blazingly quick makeover of a previously built version; the 968 is a re-



finement of the venerable 944.

The RX-7's low, wide hood, broad stance, and curvy lines shout, "look at me." And it's a gas to drive. A 255-horsepower, twin-turbo rotary en-

gine launches the car to 60 mph in a mere 5 seconds. Top speed is about 160.

The 968, Porsche's "entry-level" speedster, is no slouch, either. It hits 60 mph in 6 seconds and has about the same top end as the RX-7. But the car turns fewer heads.

QUICK START. Behind the wheel, these automobiles have distinct personalities. The 968's 3-liter four-cylinder feels a bit limp at low speeds, but once the engine hits about 4,000 rpm, the car takes off with a whoosh. The RX-7, however, pulls hard



with amazing tenacity. Each has standard antilock brakes, which makes for straight stops even on slick pavement. Sling them into a quick turn at high speed and they're rock solid. That kind of grip has a drawback, though: The stiff suspensions make for a punishing ride on rough roads.

Inside, the RX-7 has a cozy, cockpit-like feel. All of the gauges and controls are simple and easy to use.

The seats have plenty of lateral support, but lack it in the lower back. A driver air bag is standard; none is available for the passenger. The RX-7 has no backseat, and cargo space under the hatch is very limited.

SAFETY FOR TWO. The Porsche's interior is less

friendly. Some switches are confusing. For instance, there are two power side-view-mirror controls, one on the driver's door for the left mirror and another on the center console for the right side. But the optional leather seats are quite adjustable and comfortable. Driver and passenger bags are standard, and there is a backseat—in name only.

Driving fun has its price. The RX-7 starts at \$31,000 and runs to more than \$35,000, including leather seats, sun roof, and compact disk player as options. The Porsche starts at \$39,850 for a coupe with six-speed manual transmission and tops \$60,000 for a convertible with automatic transmission and options.

David Wood

Smart Money

MEDICAL DEVICES: BAD NEWS COULD LEAD TO GOOD BUYS

says Cowen & Co. analyst Michael Mullen, who likes Medtronic and Ventritex. FDA approval for their implantable defibrillators—de-

vices that regulate the heart-beat—is pending, and these companies are likely to grab sizable shares of a market Mullen expects to grow to \$1 billion by 1996. The new products treat certain heart ailments more effectively than anything now available.

HEART BALLOONS. Mullen's top picks also include U.S. Surgical, which makes equipment for the laparoscopy market, and Westmark International, which has a new imaging system for the \$1.9 billion ultrasound market.

Mullen thinks investors also should keep an eye on Datascope, which manufactures patient-monitoring devices and balloons to support

weak hearts after surgery. Datascope's new, first-of-its-kind product, VasoSeal, is a plug to seal arteries after angioplasties. It could lift earnings per share 40% to 50% over the next three to five years, says Mullen.

Some recent initial public offerings also show promise. "You'll wait a long time to see big companies like Medtronic double," says Peter Jaffray general manager at J.P. Ward Mutsch. "In a smart company, it will happen and quicker." For example, Mutsch likes Target Therapeutics, which makes catheters for arteries in the brain. Bob Czepiel, who manages Robertson Stephens Emerging Growth Fund, concurs. "No one else is doing what Target is." Another pick is Heart Technologies. Some analysts think it's overvalued, but it has a promising device that destroys plaque in arteries.

Pam B...

SOME ANALYSTS' MEDTECH CHOICES

Company	Stock Price*	Price-to-earnings
DATASCOPE	\$22 ³ / ₄	32.9
HEART	17 ³ / ₄	NA**
MEDTRONIC	74 ¹ / ₈	28.5
TARGET	20	45.4
U. S. SURGICAL	105 ⁷ / ₈	59.8
VENTRITEX	19 ⁵ / ₈	NA**
WESTMARK	52 ¹ / ₂	24.8

*May 26, 1992 **Not applicable
DATA: BRIDGE INFORMATION SYSTEMS INC.

After two hale and hearty years, medical-devices stocks have taken ill in 1992. But some analysts argue that the sector's sickbed may also be a hotbed of investment opportunities.

The high-flying medical-devices stocks are sliding partly because investors are rushing back into cyclicals, such as banks and autos, which should pick up along with the economy. The sector also suffers from uncertainty over health care reform and fear that requirements for Food & Drug Administration approval will stiffen. After outperforming Standard & Poor's 500-stock index for two years, the S&P medical-supplies index fell almost 20% so far in 1992, compared with a 2% dip in the S&P 500.

But all the bad news could lead to some good buys. "Patient investors will be very pleased with the returns,"

ONE THING HASN'T CHANGED IN MORE THAN 50 YEARS.

**LIBERTY MUTUAL LEADER
IN WORKERS COMPENSATION
SINCE 1936.**

It's a leadership position we've earned by:

REDUCING COSTS THROUGH LOSS PREVENTION

Right now, Liberty's research center—the only one of its kind—is conducting important research on workplace conditions. Our national network of 750 local loss prevention specialists applies that knowledge on site to help customers reduce loss.

CONTAINING COSTS THROUGH CLAIMS MANAGEMENT

Liberty has always been the leader in managed care. Today, LibertyPREFERRED CARE™—our national PPO network—provides quality, cost-effective care for injured workers. In 1991 alone, our medical cost containment programs saved our customers \$170 million. And, we've been effective and innovative approaches,

such as Special Investigation Units, to control the cost of fraud.

DEVELOPING SOLUTIONS FOR A TROUBLED SYSTEM

As a leader, we recognize the need for change. We've developed new products, such as our large deductible policy and Helmsman Service plan, as alternatives to traditional workers compensation insurance. We are also actively working both nationally and at the state level for workers compensation reform.

PARTNERING THROUGH DIRECT WRITING

As a direct writer, we are able to work closer with our customers. This relationship builds a partnership to control costs.

And that's what makes us a leader.

**LIBERTY
MUTUAL®**



FACING THE ISSUES THAT FACE OUR CUSTOMERS

Cooking

A CRASH COURSE IN SANTA FE COOKING

I'm crazy about New Mexican food. But with marginal cooking skills, I wouldn't dare prepare it for my friends. So, on a recent trip to New Mexico, I enrolled in the Santa Fe School of Cooking.

We're not talking Cordon Bleu here. "The focus is not to train chefs," says proprietor Susan Curtis. "This is for everybody. We want to enlighten them on the foods of the area." The class, which cost \$30, including lunch, lasted just three hours. Still, I came away with enough culinary secrets and confidence to try a New Mexican meal on my family.

Santa Fe (505 983-4511) is one of several cooking schools located in popular vacation spots that lets you take home the local cuisine through half-day crash courses or longer seminars. The dishes range from gumbo and pralines at the New Orleans School of Cooking to brioche bread pudding with dried cherries and apricots topped with caramel sauce at Tante Marie's Cooking School in San Francisco. Reservations are required for classes, which

range from \$50 or less for a half day to several hundred dollars for an extensive course.

Eighteen of us were seated around tables in the Santa Fe school's kitchen, which was adjacent to a specialty food store in a boutique shopping complex. There were teachers, housewives, even contractors, and our skills ranged from zilch to gourmet.

GAS-FREE. Instructor Lawrence McGrael, executive chef at Geronimo's Lodge in Santa Fe, first explained the basics of New Mexican cuisine. It's heavy on blue corn, fresh vegetables, chilies, and beans. When he mentioned beans, McGrael advised us to add a pinch of the herb epazote, or wormseed, during the last half-hour of cooking. It's an antifatulent. That tip alone was worth the price of the class.

McGrael prepared the food, explaining each step and answering questions

as he went along. We gasped as he threw cupfuls of red chili powder over pork cubes for *carne adovada* (meat cooked in chile), the main course, but McGrael promised it was a mild pepper that gives flavor rather than heat. We were not convinced, although he explained there are 200 different chili peppers, from sweet Anaheims to lethal habaneros. Another McGrael tip: If you use too

rolling pins—8½-inch sections of 1-inch dowel. "That's good one," McGrael said the man next to me, who rolled a perfect circle. "Hm" was all he said about my tortilla as he plopped it onto a hot skillet. It came out looking something like a man in the U.S.

Then came the best part: McGrael's *carne adovada* was spicy but sweet, beans flavorful but greasy, and the tortillas chewier than the kind that comes in packages.

We were now confident we could make a reasonable facsimile of our meal at home. In fact, the school promised to send diplomas at no extra charge to those who mailed forms saying they had tried. So, in the school shop, we snapped up canned chilies, spices, and those valuable cellophane bags of epazote for about \$1.99 a ounce.

I haven't invited my neighbors in, but my family likes my efforts so far. The *calabacitas* I prepared at home were wonderful. And though I haven't attained a perfect circle, the shape of tortillas has most definitely improved. *Sandra Atchley*



McGRAEL: TOO MUCH CHILI? ADD ORANGE JUICE

much chili powder, add orange juice, tortilla pieces, "or go to the market for another six-pack."

McGrael popped the *carne adovada* into the oven, then began working on *calabacitas*, a mixture of squashes, onions, corn, and green chilies. Everything in New Mexico, it seems, contains green chili—it's even used in ice cream. Next were the refried beans, which had been simmering all morning. McGrael added the epazote and *chipotle* chilies. Like ham bones, *chipotles* give a smoky flavor but don't add fat.

TORTILLA FLAP. Then, it was our turn. McGrael mixed up dough for flour tortillas and asked for volunteers to roll them out. That had to be easy enough, so I joined others in the front of the room, where we were handed balls of dough and tortilla-

EXPANDING YOUR CULINARY PALATE

CUISINES OF THE SUN
Kohala Coast, Hawaii
808 885-622
ext. 7801
Hawaiian

PETER KUMP'S NEW YORK COOKING SCHOOL
New York
212 410-4601
Jewish, Thai, Italian, others

SILCO COOKING SCHOOL
New Milford, Conn.
203 355-0300
New England

TANTE MARIE'S COOKING SCHOOL
San Francisco
415 788-6699
Continental, French

NEW ORLEANS SCHOOL OF COOKING
New Orleans
504 525-2665
Cajun

Worth Noting

■ **CHECKING OUT.** The *Consumers' Guide to Hospitals* lists mortality rates for 6,000 U.S. facilities that treated 19 million patients. Hospitals vary in admitting risk-elderly cases, so the guide gives actual and adjusted death-per-100 figures. It's \$12 in *Consumers' Checkbook*, (475-7283).

■ **NEW MUSEUM.** Near Montmartre gardens outside Paris, the Musée Américain Given opens June 2. Exhibits show links between French and American art. Hours: 10 a.m. to 6 p.m. Tuesday-Sunday.



A Cure For Cancer Might Be Just Out Of Our Reach.

It's not surprising that one out of four pharmaceuticals comes from tropical forests. Or that an estimated 1,400 tropical plants, like the rosy periwinkle, have promising anti-cancer properties. After all, as home to half of the world's plant and animal species, these forests are a vast biochemical warehouse.

What is surprising is that the human race is destroying this living resource at an alarming pace.

Each day, 74,000 forested acres are

cleared, pushing untold numbers of species toward extinction.

The future of medicine and agriculture, the existence of thousands of wildlife species, and the survival of hundreds of millions of people in developing countries depend on what we do now to keep the tropical forests alive.

The means of solving this problem are within our reach. Write in order to find out how you can help keep the tropical forests alive, before the reasons disappear.

Keep Tropical Forests Alive.



Tropical Forest Project, World Resources Institute, 1735 New York Avenue, N.W. Washington, D.C. 20006/Prepared by Richardson, Myers & Donofrio, Inc.



Business Week is proud to present its first-ever regional **Directory of Industrial Design**.

The **Directory of Industrial Design** contains a listing of industrial design firms showcasing their unique product design services. For more information on the advertisers in this

Directory, please contact the firm listed in the ad.

Product Design
and Marketing
Communications...
Resulting in
outstanding client
growth in
extraordinary
times.

Ashcraft Design

1132 West Pico Blvd., Los Angeles CA 90064 310 479 8330

BRAUND

DESIGN

BRAUND DESIGN INCORPORATED

601 FOURTH STREET NO.120

SAN FRANCISCO, CALIFORNIA 94107

TEL 415 541 7704 FAX 415 541 7706

Design Continuum Inc. • 648 Beacon Street • Boston, MA 02215 • phone 617 267 5115 • fax 617 267 3923 • Design Continuum West • 636 Fourth Street • San Francisco, CA 94107 • phone 415 957 1838 • fax 415 243 9278



Design Continuum Italia • Via Carlo Vittadini • 20136 Milano • phone 39 (2) 58 305 110 •



DESIGN EDGE

Design Edge is an Austin-based industrial design consultancy offering complete product development services, including product and interface design, mechanical engineering, and prototyping. Over the past five years we have received fourteen international awards, including two IDEAs, for our work with clients as diverse as Apple Computer, Casio, Dell Computer, NASA, Texas Instruments, and Toshiba. The use of state-of-the-art technology and full CAD integration allows us to combine award-winning design with efficient development cycles. Please contact Mark Kimbrough or Lindsay Gupton at 512.477.5491 or fax at 512.477.1245 for more information.

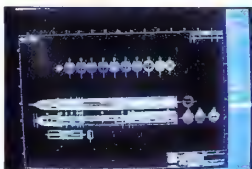


Design Edge • 1203 San Antonio Street
Austin, Texas 78701 • 512.477.5491 voice • 512.477.1245

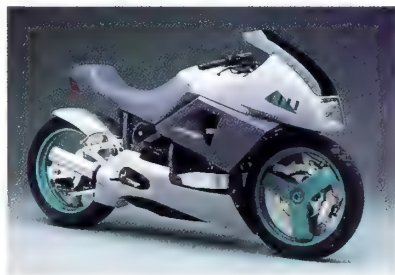
PRODUCT
CONSUMER
INDUSTRIAL
BUSINESS
MEDICAL
SCIENTIFIC
LEISURE

DESIGN
PLANNING
MANAGEMENT
EVALUATION
STUDIES
UPDATES
RESEARCH
H/FACTORS
DEVELOPMENT
STANDARDS
APPEARANCE
ENGINEERING
CAD/DWG
MATERIALS
MECHANICAL
MODELS
PROTOTYPES
TEST RIGS
MULTIPLES
LIAISON

DESIGNOLOGY



**You already know many of our designs.
Although they may just be a blur to you.**



Thirty five years ago, it began with a bottle design for a company called Kikkoman. Now, we've focused our attention on every facet of the human experience. We explore man's relationship to his environment. His tools, and of course, his toys.

GK Design has a list of credits that would fill this magazine. We're one of the largest design consultancies in the world.

Employing 270 designers at studios in Los Angeles, Tokyo, Amsterdam, Hiroshima, and Kyoto. Each is ready to apply his passion, to your passion.

In transportation design, product design, graphic design and marketing. Feel free to call us at 310/542-8739.

GK DESIGN
GK Design International, Inc.

IDEO

Product Development

innovation

through design

for

strategic

competitive advantage



IDEO PRODUCT DEVELOPMENT

Palo Alto 415.688.3400 (Eng) 415.688.3470 (ID) San Francisco 415.397.1236

Chicago 708.866.1826 Boston 617.863.0022 London 011.44.71.485.1170



CIPD

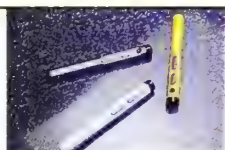
Humidifier, electric rice cooker and portable cooker - designed by INNO DESIGN, INC. CIPD was applied to create their family look for It's Magic line of products.

To find out how INNO's CIPD (Corporate Identity through Product Design) program could put your products a step closer to the end-users, call INNO DESIGN, INC. toll free 1-800-443-INNO

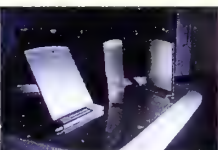
INNO DESIGN, INC.

1290 Oakmead Parkway, Suite #310, Sunnyvale, CA 94086

Tel. 1-800-443-INNO, (408) 736-4666, Fax (408) 736-4672



PRM 1 remotes for Mitsubishi



Workspace 2000 portatools for Apple Computer

PATTON DESIGN

The philosophy of Patton Design is harmony between very energized elements that once reconciled, can create very bold, powerful and innovative new ideas. These elements that create our philosophy are, aesthetic design, mechanical engineering, marketing analysis, human interface design and human factor engineering.

Furthermore, the goal of Patton Design is to assure that new technology innovation yields elegance, simplicity, and inspiration to our lives.

Patton Design creates the synthesis required to assure success in a competitive world where only the best products and companies survive.

PATTON DESIGN

Call today for a detailed list of how our consultants can aid you. 714.966.1616
8 Potpourri Suite 170, Irvine, CA 92714



Ricchio design

Knoll International • The Ricchio Chair • 1991 Roscoe Award Craftsman • Corporate Identity Program
Xerox Corporation • Strategic Product Planning & Design
Peter Pepper Products • Catalog Design

Ricchio Design

Seal Beach, California

For a Capability Brochure Contact: Joe Ricchio • 310.598.1350



*Providing full-service product design
and development for 25 years.*

S G Hauser Associates Incorporated
24009 Ventura Boulevard, Suite 200
Calabasas, California 91302
818 591 8095 • Fax 818 591 8306

APPLE COMPUTER, INC.
COACTIVE COMPUTING CORP.
COMTECH LABS, INC.
COSTAR CORPORATION
FOCALPOINT TECHNOLOGIES
GENERAL ELECTRIC PLASTICS
KENSINGTON MICROWARE LTD.
O'NEILL, INC.
ORINUS SYSTEMS
SUN MICROSYSTEMS, INC.
TRIMBLE NAVIGATION, INC.
YAMAHA MOTORS, US CORP.
ZOEX

PROJECT
VENT

VENT DESIGN ASSOCIATES Unit 15 1436 White Oaks Road
Campbell, California 95008
FAX 408 559 4036 408 559 4015 USA

OREGON

TOKYO

Apple Computer
Avia
Bausch & Lomb
Bridgestone
Canon
General Magic
Hewlett-Packard
Intel

z i b a DESIGN

Intermec
Microsoft
NCR
Nike
Panasonic
Pioneer
Sanyo
Sharp

503-223-9606

**For additional
information regarding the
advertisers in
this Directory, please
contact the
firm listed in the ad.**



The most important check you'll ever write

Please consider being an organ or tissue donor. Just take out your license and check the box on the back.

Give someone the chance of a lifetime.

Sponsored by the Coalition on Donation.

1-800-24-DONOR

lex gives the starting page for a story or feature a significant reference to a company. Most stories are indexed under their own names. Companies listed only in tables are not included.

Brown Boveri 44, Semiconductor s 110 lustrie 28 s 38 Airlines 32, 74 Express 36, 78 Busch 34 44 dio 52 66, 122 52, 74 ulf ities 100 rt 80	Eli Lilly 102 Equity Research 83 Executive Life 114 EZCORP 102 F F. A. O. Schwarz 36 Federal Express 52 Fidelity Investments 114 First Boston 74 First Union 43 Ford 26, 52, 56, 58 401(k) Advisors 114 Framatome 44 Fujitsu 103, 104 Fund American 38 G Gannett 83 Gartner Group 104 GCA 110 GE 44, 60 GEICO 38 Gencorp 72 General Development 100 Geronimo's Lodge 118 G. Heileman Brewing 34 Gillette 18 GM 52, 58, 122 GM/Hughes Electronics 52 Golden West Financial 74 Goodyear 52, 56, 122 Gramercy Capital Management 83 Group Four Design 52, 64 GVO 52 H Hanshin Securities 49 Harris 109 Harris Bankcorp 82 Hasbro 36 Hay Group 86 Heart Technologies 116 Herman Miller 61 Hewlett-Packard 52 Hilton Hotels 88 Hitachi 60, 103, 104 Honda 26 Honeywell 18, 114 Hospital Corp. of America 31 Humana 31 Hyundai 49 I IBM 7, 66, 104, 109, 110 ICI Americas 52 Ingersoll-Rand 52, 64, 122 Intel 104, 110 J J. D. Power & Associates 26 J. Walter Thompson 78 Josephthal Lyon & Ross 102 Judith 36 JMB Realty 88 K Keefe, Bruyette & Woods 94 Knight-Ridder 83
ca 94 ust 83 nks 104 rnational 82 ies 102 Group 11 ple's 81 Blue Shield of ota 104 ltants 114 rld 88 co s 102 l 7, 64 attan 94 nking 94 4 ence Monitor 92 Enterprises 88 94 nalive 74 32 nsurance 74 40 3 c ue 10 or 16 s 28, 32 C uum 52, 57 E ment 104, 110 disc tfin & tte am Lambert 92	

Kohler **52**
Korn/Ferry International **74**
L
Lamalie Associates **74**
Levi Strauss **18**
Louis Harris & Associates **36**
Lucky-Goldstar **49**
Lunar Design **66**
M
Manufacturers Hanover Trust **83**
Marriott **88**
Mattel **36, 80**
Max Factor **81**
Mazda **26**
McDonnell-Douglas **28**
McGraw-Hill **24**
MCI Communications **36**
Medtronic **66, 102, 116**
Merrill Lynch **114**
MGM Grand **88**
Mirage Resorts **88**
Mitsubishi **51**
Mitsui **104**
MMS International **24**
Momenta **52**
Morgan Stanley **102**
Motorola **104, 110**
Mountleigh **40**
N
NCR **52**
NEC **40, 103**
Nestle **51**
New England Telephone & Telegraph **104**
New Orleans School of Cooking **118**
Nikon **110**
Northwest Airlines **28, 32, 88**
O
Occidental Petroleum **92**
Ogilvy & Mather **78**
Olympia & York **40**
Oppenheimer **88**
OXO International **52**
P
Pacific Gas & Electric **7**
Pacific Telesis **7**
Paramount Petroleum **92**
Paul Ray Carre Orban International **74**
PepsiCo **38**
Perkin-Elmer **110**
Petroleum Finance **51**
Phibro Energy **38**
Philip Morris **18, 34**
Philips **30, 110**
Pioneer Electronic **38**
Piper Jaffray **116**
Procter & Gamble **78**
Putnam **114**
Q
Quaker Oats **18**
R
Rauscher Pierce Refsnes **102**
Rawlings Sporting Goods **57**
Reebok **52, 57**
RJR Nabisco **92**
Robertson Stephens **116**

S

Saatchi & Saatchi **78, 92**
Safeco Asset Management **102**
Safeway **83**
Salomon **40, 94**
Salomon Brothers **31**
Samsung **49**
Sanco Toy **36**
Santa Fe School of Cooking **118**
Sara Lee **74**
Saudi Aramco **51**
Sears Roebuck **78**
Seidler Amdec Securities **102**
Sematech **110**
S. G. Hauser Associates **52**
Siemens **44**
Silicon Graphics **40**
Silicon Valley Group **110**
Silicon Valley Group Lithography Systems **110**
Smart Design **52, 66**
Sony **52**
Spalding **122**
Spalding Sports Worldwide **52, 57**
SpectraLogic **66**
Sprint **38**
Standard & Poor's **36, 116**
Steelcase **52, 61**
Stiefel Laboratories **109**
Storer Communications **92**
Stroh Brewery **34**
Sunkyoong **49**
Sun Microsystems **103**

T

Tante Marie's Cooking School **118**
Target Therapeutics **116**
Tatham RSCG **78**
Texas Instruments **52, 110**
Textron **109**
Thomson Consumer Electronics **60**
Time Warner **30**
Toshiba **52, 104, 110**
Towers Perrin **114**
Toyota **26**
Trans World Airlines **32**
T. Rowe Price **114**
Trump Castle **88**

U

Ultratech Stepper **110**
Uncle Ben's **78**
Unisys **104**
United Airlines **28, 32**
USAir **32**
U. S. Surgical **116**

V

Ventritex **116**
Villy Nielsen **36**
VLSI Research **110**

W

Warnaco **81**
Wedge Innovations **52**
Wells Fargo **43**
Westinghouse **44**
Westmark International **116**
Whittle Communications **30**
Wilson Sporting Goods **57**
WPL Holdings **72**
WPP Group **78**

X

Xerox **52, 64**

**With every new subscription,
Business Week will plant a tree
in one of America's Heritage Forests.**

Every week Business Week brings you up to date on the world of business. We're committed to bringing you coverage of business news that is not only timely but insightful. Now, we're also committed to teaming up with you to make a positive contribution to our environment.

With the help of the Global ReLeaf Campaign of the American Forestry Association (AFA), we will plant a tree in one of America's Heritage Forests with every new, paid Business Week subscription.

Global ReLeaf educates people on opportunities to enhance the environment through improvement of trees and forests. The campaign creates these positive environmental opportunities for individuals, community groups and businesses.

The Heritage Forest Program is one such opportunity. Heritage Forests are special public lands, selected by the AFA as lands where private-sector donations can create new forests, that would not be possible under existing public programs and budgets.



SUBSCRIBE TO BusinessWeek NOW

We'll plant your tree and still offer you substantial savings. At only 89¢ an issue, you save 64% off the \$2.50 cover price and make a positive contribution to the environment.

Enjoy the convenience of having Business Week delivered and the satisfaction of having done something to help improve and preserve America's forests.

It's easy to do. Fill out one of the post-paid cards found in this issue and drop it in the mail today or call toll-free 1-800-635-1200.

For more information on the Global ReLeaf Program, call (202) 667-3300 or write to them at P O Box 2000, Washington, D C 20013



ABSOLUT SEATTLE.

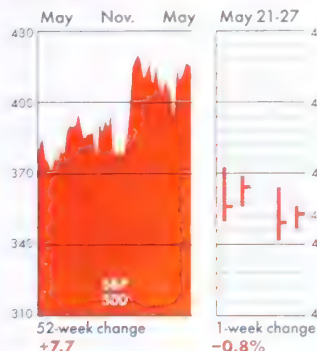
FOR GIFT DELIVERY OF ABSOLUT® VODKA (EXCEPT WHERE PROHIBITED BY LAW) CALL 1-800-243-3762. PRODUCT OF SWEDEN.
40 AND 50% ALC/VOL (80 AND 100 PROOF), 100% GRAIN NEUTRAL SPIRITS. © 1992 V&S VIN & SPRIT AB. IMPORTED BY CARILLON IMPORTERS, LTD., TEANECK, NJ.

Investment Figures of the Week

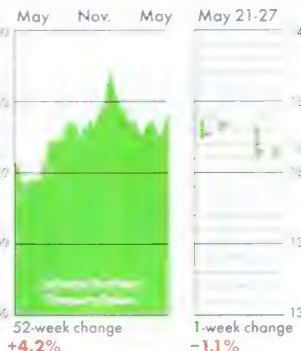
MARKET COMMENTARY

Every week in the financial markets, which were upset on May 27, as traders fretted about a sharp increase in oil prices of long-term Treasury bonds, but airline stocks were up, as traders fretted about a sharp increase in oil prices. The Dow Jones industrial average rose 22.6 points, to 4,300.27, but oil shares rose sharply.

STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

INDEXES	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIAL AVERAGE	3370.4	-0.7	13.5
RUSSELL 1000	217.9	-0.9	9.0
RUSSELL 2000	197.0	-0.2	12.4
RUSSELL 3000	232.1	-0.8	9.2

STOCKS	Latest	% change Week	% change 52-week
FINANCIAL TIMES 100	2698.6	-0.5	8.3
NIKKEI INDEX	17,822.6	-4.6	-30.1
TSE COMPOSITE	3382.9	0.0	-3.3

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.79%	3.67%	5.6%
30-YEAR TREASURY BOND YIELD	7.90%	7.81%	8.3%
S&P 500 DIVIDEND YIELD	2.99%	2.96%	3.2%
S&P 500 PRICE/EARNINGS RATIO	25.2	25.4	17.8

TECHNICAL INDICATORS

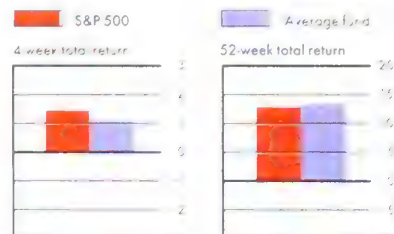
	Latest	Week ago	Reading
S&P 500 26-week moving average	407.3	405.9	Positive
Stocks above 26-week moving average	50.6%	53.7%	Negative
Speculative sentiment: Put/call ratio	0.42	0.46	Positive
Insider sentiment: Vickers sell/buy ratio	2.26	2.29	Neutral

INDUSTRY GROUPS

LEADERS			WEAKEST		
	4-week	52-week		4-week	52-week
MINING	14.2	1.3	NEW MONT MINING	18.4	30.3
GAS DRILLING	11.7	-10.2	ROWAN	24.5	-17.6
EQUIPMENT AND SERVICES	11.5	2.2	HALLIBURTON	20.7	-29.3
CARE SERVICES	10.8	30.5	ALZA	13.8	43.0
CRUDE OIL	10.7	-2.6	ORYX ENERGY	17.6	-25.7
LAGGARDS			WEAKEST		
	4-week	52-week		4-week	52-week
TOOLS	-15.0	25.8	ACME CLEVELAND	-19.4	10.2
APPAREL RETAILERS	-11.6	-9.5	GAP	-15.8	12.9
FACTURED HOUSING	-11.6	8.3	FLEETWOOD ENTERPRISES	-12.7	11.0
MANAGEMENT	-10.3	-42.7	COMMUNITY PSYCHIATRIC CENTERS	-14.9	-69.0
TIME	-9.7	15.7	BALLY MANUFACTURING	-15.6	-2.6

MUTUAL FUNDS

LEADERS		LAGGARDS	
4-week total return	%	4-week total return	%
AMERICAN SMALL COMPANY	13.7	SCHIEF VALUE	-13.3
KINGDOM SMALL COMPANY	10.6	STEADMAN AMERICAN INDUSTRY	-12.0
SELECT BIOTECHNOLOGY	10.4	STEADMAN OCEANOGRAPHIC TECHNOLOGY	-10.5
52-week total return		52-week total return	
SELECT REGIONAL BANKS	54.6	LEXINGTON STRATEGIC INVESTMENTS	-30.0
SELECT SAVINGS & LOAN	53.9	STRATEGIC GOLD/MINERALS	-29.1
SELECT AUTOMOTIVE	51.5	G. T. JAPAN GROWTH	-26.4



RELATIVE PORTFOLIOS

Assets	Treasury bonds	U. S. stocks	Money market fund	Foreign stocks	Gold
Assets					
Assets	\$11,332	\$11,238	\$10,414	\$10,345	\$9,354
Assets	-1.24%	-0.34%	+0.06%	-0.44%	-0.68%

Assets are as of market close Wednesday, May 27, 1992, unless otherwise indicated. Assets include S&P 500 companies only; performance and share prices are as of market close.

Assets are as of market close Wednesday, May 27, 1992, unless otherwise indicated. Assets include S&P 500 companies only; performance and share prices are as of market close.

HOW TO CREATE GENDER-BLIND COMPANIES

Charlotte L. Beers, chief executive officer. Jill E. Barad, president. Judy C. Lewent, chief financial officer. No one can say corporate women haven't made progress. But in getting to the top, these women have beaten the odds. The big question is this: Are those odds changing (page 74)?

The answer depends on whether you subscribe to the "pressure in the pipeline" theory. It goes like this: Half the college and professional degrees awarded in the U.S. are now earned by women. As their numbers in the work force increase, their advancement will inevitably follow. And with 50% of entry-level managers female, no corporation will be able to compete in an increasingly competitive world by willfully ignoring half its talent.

It sounds logical. But if logic ruled, more women would already be in senior management—certainly more than the present measly 3%. The truth is, women are progressing, but not as fast as they should. What's required is a little consciousness-raising. Male corporate executives need to search their hearts and minds—and reexamine their practices—to understand why women don't advance at their companies. Even allowing for natural attrition—there is only so much room at the top, after all—something else is hobbling the female executive. That something is the discomfort that many men still feel in dealing with women in the workplace.

This unease may seem like the inevitable barrier between the sexes. But it can result in sexual discrimination—and companies need to overcome it. Are there attitudes and habits among managers that suggest they measure male and female performance by different yardsticks? Are there work and family policies that can be adopted to ease the responsibilities that burden mainly women? How about a review of raise and bonus procedures to eradicate inexcusable disparities in pay?

Demographics will make a difference. But demographics alone won't do it. Both men and women, employers and employees, have to fight the subtle devil of sexism. Our eyes must be opened if Corporate America is ever to become gender-blind.

DON'T PLAY POLITICS WITH NUCLEAR SAFETY

The \$10 billion multinational plan to defuse the threat posed by unsafe nuclear power reactors in the former Soviet bloc seems to be a winner—and it had better be (page 44). If the U.S., Europe, and Japan can follow through and agree on funding, the deal can be formally approved at the July 6 Group of 7 summit.

Ever since Mikhail Gorbachev appeared on the scene, the West has been asked to underwrite a succession of stabilization funds, defense-conversion funds, and economic-re-

form programs for the former Soviet Union. All of them shared a drawback: Without corroboration, the West could never be sure whether the aid was really needed. Then, there was always the risk that the aid would wind up being wasted or stolen.

But this plan to ensure nuclear safety is a lot different. With Chernobyl as a precedent, nobody can doubt the seriousness of the problem or the magnitude of the potential consequences. Furthermore, because the aid will be funneled through the International Atomic Energy Agency, the European Bank for Reconstruction & Development, the World Bank, and the European Community, the West has a way to verify the dispersal of the funds.

It's obvious that the Soviet nuclear problems pose a threat to Western Europeans—who are, after all, downwind from potential Chernobyls. But what of the U.S., so far away? Doubtters need look no farther than Cuba, where two Soviet-designed reactors are approaching completion. At a minimum, the plan would give Washington a better understanding of what could go wrong and would increase pressure on the Cubans to allow the West to monitor safety at the plants.

GREAT DESIGN NEEDS GREAT COOPERATION

There is so much talk these days about improving America's competitiveness that a key trend seems to be getting lost in all the verbiage. From power tools to computers to baseball gloves, U.S. corporations are using sophisticated industrial-design techniques to radically improve the quality and the usability of their products. In fact, the 1992 Industrial Design Excellence Awards reveal the shape of things to come, we could be on the brink of an American product renaissance that would rival those of the Japanese and the Europeans in the '70s and '80s (page 52).

For many years, U.S. corporations forgot what industrial design can bring to product development. The engineering and marketing departments decided what should be made, then tossed the finished product over the wall to the designers to put a pretty box around it.

Today, companies such as Ingersoll-Rand, Goodyear, Apple, Spalding, and General Motors are bringing designers in from the start to join core product-development teams. They include people from purchasing, manufacturing, engineering, and marketing. The designers emphasize the way people actually use products, thereby shifting away from engineering's fascination with power and performance.

Instead of using industrial design to add decorative flourishes, many corporations are finally building products that function well by the operator's standards and solve specific problems for people at work—or play. And by teaming up early with the production side, designers are changing the choice of materials along with the way products are made, often dramatically improving the manufacturing process. This is industrial design at its best, and by using it creatively, more corporations are making products that people really want.

ESS WEEK
June 15

BusinessWeek



15, 1992

A McGRAW-HILL PUBLICATION

\$2.75

LATIN AMERICA

BURLINGAME

JUN 5 1992

LIBRARY

PAGE 50

THE BIG MOVE TO FREE MARKETS

THE
IMPACT
ON
POVERTY
AND POLITICS

HOW U.S.
COMPANIES
ARE
BENEFITING

LATIN
FINANCIAL
MARKETS
ARE
SIZZLING

A NEW
GENERATION
TAKES
CHARGE



94010 *****5-DIGIT
0602 105811160 DEC92 126 2717
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA 94010-4083

MASS MUTUAL GAINS 40% IN PRODUCTIVITY, THANKS TO DIGITAL.

Despite the recent economic trend, Mass Mutual has shown healthy growth over the past few years. But, as Executive Vice President John Pajak points out, the growth isn't entirely the result of the products offered by this giant insurance carrier.

"When you come out with a hot new product, a few weeks later everyone else has the same thing. So the only way to separate yourself from the pack is through service."

The strength of an insurer's service greatly depends on its on-line transaction processing capabilities for claims. And Mass Mutual, known for being avant-garde by its peers, maintained that reputation by moving its life and health claims from a mainframe platform to Digital's VAX[™] systems and a VAXcluster[™]. A move they felt would give them greater flexibility and a 15% increase in productivity.

"That was our goal, that, and making sure the move would be completely transparent to our customers. They would never accept hearing that their claim was delayed because we weren't up to speed on a new system."

With Digital's COHESIO software development tool

D I G I T A L . T H I

and on-site assistance, Mass Mutual built its new process system in phases. When a phase was completed, people were trained in it, and it was brought on-line.

As a result, customers never noticed any delay. In fact, they noticed the exact opposite, as Mass Mutual was able to cut its response time from weeks to days. A

**TEAMWORK
OPENS
WAY TO
IMPRESSIVE
INCREASE.**

that resulted in a 40% increase in productivity.

"We're also capturing more data in far less time. That information is what allows us to tailor our service, and that's what separates us from everyone else.

"We have a very high retention rate with clients because of our service. And thanks to Digital, our service is where it is today."

Find out how Digital can help you deliver a higher level of service. Call 1-800-822-2262, ext. 92. Or contact your Digital **digital** office.



*John Pajak
Executive Vice President
Mass Mutual*

PEN ADVANTAGE.

PEOPLE
WORK
TOGETHER. THEIR
WINDOWS
APPLICATIONS
SHOULD, TOO

A rowing team of six people in a red boat on blue water. The rowers are wearing green and black uniforms. The boat is moving towards the right. The background is a dark, textured surface, possibly a wall or a large rock.

If you're considering a move to Windows™ and find yourself confronted with a choice of which software applications to evaluate, stop for a moment. And imagine a suite of individually outstanding Windows applications. Yet, fully integrated to make sharing information between them easier than ever. There's Lotus® 1-2-3®, Ami Pro®, Freelance Graphics™ and cc-Mail™, a spreadsheet, a word processor, presentation graphics program and an electronic mail product. All in one package. All from Lotus, the software company that understands the benefits derived from people and applications Working Together™. We call it SmartSuite™. Because each product has been intelligently designed to offer the ultimate in ease of use, integration and network connectivity. With one common interface. And with common features like our revolutionary SmartIcons™ that give you easy one-click access to your most frequent tasks. So if you're ready to take advantage of the Windows environment, call Lotus at 1-800-872-3387, ext. 6769. After all, SmartSuite allows you to work with four award-winning products that work together for less than the price you'd expect to pay for two. Which, we believe, also makes it a very smart choice.

Lotus SmartSuite

© 1992, Lotus Development Corporation. All rights reserved. Lotus and 1-2-3 are registered trademarks and Ami Pro, Freelance Graphics, SmartSuite, SmartIcons and Working Together are trademarks of Lotus Development Corporation. Windows is a trademark of Microsoft Corporation. cc-Mail is a trademark of cc-Mail, Inc., a wholly owned subsidiary of Lotus Development Corporation.



A NEW DAY IN THE NEW WORLD: LATIN AMERICA IS SUDDENLY BASKING IN THE SUN OF OPEN MARKETS AND EAGER INVESTORS

Domestic

50 LATIN AMERICA

54 THE LATIN IVY LEAGUE

56 MULTINATIONAL MECCA

60 BRAVE NEW FINANCIAL WORLD

Technology

34 YEAR OF THE THIRD FORCE

37 PEROT AND VIETNAM

39 CONTINENTAL DIVIDE

40 PROXY BATTLE

41 ANGRY AFFILIATES

42 LIFE AFTER CASSETTES

43 COMPAQ ATTACKS THE CLONES

44 SUPERSAVER WAR

47 IN BUSINESS THIS WEEK

Economic Annals

28 ECONOMIC VIEWPOINT

30 ECONOMIC TRENDS

31 BUSINESS OUTLOOK

Government

49 WASHINGTON OUTLOOK

Science & Technology

95 DEVELOPMENTS TO WATCH



THE TOUGHEST \$!&# IN SPORTS: CHICAGO'S JERRY REINSDORF MADE CONTENDERS OF THE WHITE SOX AND CHAMPS OF THE BULLS. HE DOESN'T MIND THAT HE ALSO MADE ENEMIES

128 OFFICE AUTOMATION SPECIAL REPORT: BURNED BY THE TECHNO-FANTASIES OF THE '80s, COMPANIES HAVE WISED UP. NOW, STRATEGY COMES FIRST, THEN A MORE FOCUSED TECHNOLOGY

37 LOOKING FOR MIAs—OR BUSINESS? VIETNAMESE OFFICIALS SAY NEAR-CANDIDATE ROSS PEROT TRIED TO LAY GROUNDWORK FOR WESTERN DEALS. PEROT SAYS: NONSENSE

TECHIES VS. TECHNO-COPS

U. S. exporters escalate their battle against wider restrictions on goods with military applications

120 INSIDE WALL STREET

This September's push
Hints from the cleanup crew
Successful recapitalizations

145 INVESTMENT FIGURES OF THE WEEK

The Corporation

122 NORDSTROM'S GANG OF FOUR

The store's collegial management team has its hands full these days as profits slide and the stock languishes

124 PLAYING WITH THE BIG KIDS

Toyotas made a smart move
Company's expansion abroad
turning it into a top U. S. toymaker

Special Report

128 OFFICE AUTOMATION 1992

Corporate America is learning to tap the full potential of computer systems—not to replace good management, but to aid it

132 UPS: UP FROM THE STONE AGE

Chairman Kent Nease is ambitious, but he came up with a system that makes the grade

133 BAD MEDICINE FOR BLUE CROSS

Its in-house self-computer system nearly hospitalized the Massachusetts insurer

Personal Business

136 INVESTING: Growth vs. value

LEISURE: Tandem bicycles

SMART MONEY: Drug stocks

STEREO: High-tech speakers

Readings

6 BUSINESS WEEK INDEX

10 READERS REPORT

12 CORRECTIONS & CLARIFICATIONS

25 BOOKS

From May to the Mind: Forming and Launching in America from the Civil War to Michael Milken

143 INDEX TO COMPANIES

146 EDITORIALS

'Socialismo, no!' 'Capitalismo, si!' Curing a high-tech hangover

Sports Business

POWERBALL

The out-of-nowhere rise of Bulls and White Sox owner Jerry Reinsdorf

Industries

DROPPING THE GOODS

Intense rivals hurt, but U. S. forklift makers Caterpillar and Clark also wounded themselves

Legal Affairs

THE BEST JURY MONEY CAN PICK

More businesses are taking trial consultants to court with them—and the new specialty is thriving

Marketing

COUPON CONS

Frauds, scams, and counterfeits cost companies nearly \$1 billion a year, but they're fighting back

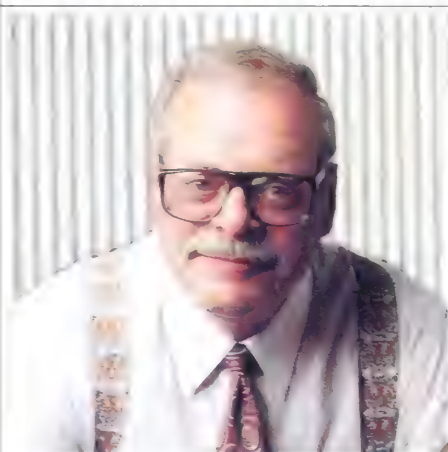
Finance

AMEX FIGHTS BACK

It's focusing on a smaller, more affluent base of cardholders

NASTY DAYS AGAIN AT COOPER

The contact-lens company faces irate shareholders and an SEC probe

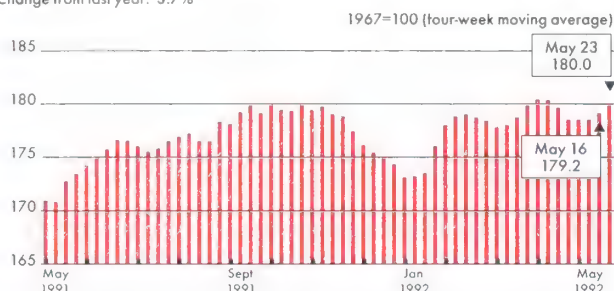


112 HARVEY GOLUB'S CARD TRICK: CAN THE PRESIDENT OF AMERICAN EXPRESS BEEF UP THE COMPANY'S CORE BUSINESS? IF SO, HIS STAR COULD RISE EVEN HIGHER

BusinessWeek Index

PRODUCTION

Change from last week: 0.4%
Change from last year: 3.7%

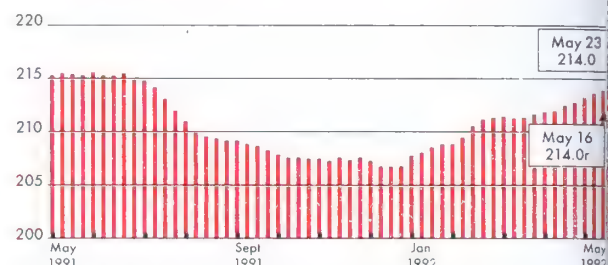


The **production index** increased slightly during the week ended May 23. Seasonally adjusted rail-freight traffic and paperboard output were up sharply, and production of electric power, coal, steel, and paper increased as well. Crude-oil refining output edged lower, while truck and auto output were unchanged from the previous week. Before calculation of the four-week moving average, the index advanced to 180.8, from 180.2.

BW production index copyright 1992 by McGraw Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: -0.8%



The **leading index** was virtually unchanged during the week ended May 23. A sharp gain in the number of business failures led the weakness, while lower stock prices and deteriorating growth in real estate loans and M2 also contributed. But yields, however, were lower for the week, and growth in materials prices picked up. Before calculation of the four-week moving average, the index dropped to 212.7 from 215.1 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (5/30) thous. of net tons	1,771	1,801#	13.9
AUTOS (5/30) units	112,697	135,716r#	25.7
TRUCKS (5/30) units	74,840	91,592r#	14.8
ELECTRIC POWER (5/30) millions of kilowatt-hours	51,479	54,598#	-14.7
CRUDE-OIL REFINING (5/30) thous. of bbl./day	13,802	13,615#	-0.3
COAL (5/23) thous. of net tons	18,820#	18,577	-3.0
PAPERBOARD (5/23) thous. of tons	813.3#	757.0r	9.2
PAPER (5/23) thous. of tons	755.0#	734.0r	5.0
LUMBER (5/23) millions of ft.	501.4#	497.7	-1.7
RAIL FREIGHT (5/23) billions of ton-miles	20.8#	20.7	9.5

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA¹, SFPA², Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/3)	128	130	139
GERMAN MARK (6/3)	1.61	1.63	1.76
BRITISH POUND (6/3)	1.82	1.80	1.68
FRENCH FRANC (6/3)	5.42	5.48	5.94
CANADIAN DOLLAR (6/3)	1.20	1.20	1.15
SWISS FRANC (6/3)	1.47	1.49	1.51
MEXICAN PESO (6/3) ³	3,098	3,088	3,008

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/3) \$/troy oz.	339.900	338.600	-6.2
STEEL SCRAP (6/2) #1 heavy, \$/ton	92.00	94.00	3.4
FOODSTUFFS (6/1) index, 1967=100	202.1	199.6	-0.7
COPPER (5/30) ¢/lb.	105.6	105.2	3.1
ALUMINUM (5/30) ¢/lb.	60.5	61.0	4.3
WHEAT (5/30) #2 hard, \$/bu.	3.89	3.78	30.1
COTTON (5/30) strict low middling 1-1/16 in., ¢/lb.	54.29	55.31	-34.0

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (5/29) S&P 500	413.94	414.26	
CORPORATE BOND YIELD, Aaa (5/29)	8.25%	8.23%	
INDUSTRIAL MATERIALS PRICES (5/29)	98.1	97.8	
BUSINESS FAILURES (5/22)	594	396	
REAL ESTATE LOANS (5/20) billions	\$402.5	\$404.7r	
MONEY SUPPLY, M2 (5/18) billions	\$3,417.2	\$3,422.4r	
INITIAL CLAIMS, UNEMPLOYMENT (5/16) thous.	403	407r	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
PERSONAL INCOME (Apr.) annual rate, billions	\$4,990.3	\$4,987.5r	
CONSUMER SPENDING (Apr.) billions	\$4,043.7	\$4,032.5r	
12 LEADING INDICATORS COMPOSITE (Apr.) index	148.9	148.3r	
CONSTR. SPENDING (Apr.) annual rate, billions	\$418.8	\$420.0r	

Sources: Commerce Dept., Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/18)	\$953.9	\$955.3r	
BANKS' BUSINESS LOANS (5/20)	285.4	286.6r	
FREE RESERVES (5/27)	1,331	481r	
NONFINANCIAL COMMERCIAL PAPER (5/20)	145.9	146.0	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (6/2)	3.89%	4.02%	5.0
PRIME (6/3)	6.50	6.50	8.0
COMMERCIAL PAPER 3-MONTH (6/2)	3.98	3.91	6.0
CERTIFICATES OF DEPOSIT 3-MONTH (6/3)	3.93	3.90	5.0
EURODOLLAR 3-MONTH (5/30)	3.91	3.81	5.0

Sources: Federal Reserve Board, First Boston

Who Says You Can't Re-create History?

Once upon a time, when we were



smaller and our
heroes larger, and
you could take a
trolley to the game,
the Athletics were
in Philadelphia,
the Giants in
New York, and
the Cardinals,

in St. Louis, were known as the
Gashouse Gang.

Major League Baseball's Cooperstown
Collection brings back those days,
with classic jackets, jerseys, caps and
memorabilia from summers past.

Take a trip to a better department
store, sports specialty store or other fine
retailer and come back with your own
re-creation of history.

Major League Baseball Products.
A part of baseball you can call
your own. 

**CATCH
THE
FEVER**



WHAT, EXACTLY, IS ACCEPTABLE RISK?

Last night you powered down a cholesterol-rich pasta with cream sauce. This morning you jaywalked across a busy four-lane street, and next weekend you're going to trust some nineteen-year-old who tells you there's no way the bungee cord can break.

Next to that, choosing new computer equipment is merely *career* threatening.

We don't think it should be quite so risky. Which explains the existence of NetWare®, Novell's networking software that unites such strange bedfellows as IBM and Sun; Oracle and Microsoft.

NetWare not only preserves investments you've made, it'll accommodate whatever decisions you make next year. Our eighth generation products are the result of alliances we've built with over 2500 software, hardware and system vendors, who've designed and tested thousands of *their* products to work with ours.

Which means you really only have to ask one question to make your next risk an acceptable one. "Does it run with NetWare?"



The Past, Present, and Future of Network Computing.

FOR MORE INFORMATION, CALL 1-800-NETWARE



Readers Report

household survey, including its New York State component. In this instance, the state data add up to the national data. Levine is obviously confusing the household survey with the major disparity between nationally reported nonfarm payroll employment and the more realistic aggregated state nonfarm-payroll employment reports.

Philip Braverman
Chief Economist
Senior Vice-President
DKB Securities Corp.
New York

USING HUD FUNDS FOR POLICE WORK ISN'T MISUSE

Referring to "Cleaning up HUD: It isn't over yet" (Government, Apr. 20), we believe that the funds we used to contract for special police services were eligible for that purpose. We disagree with the Housing & Urban Development Dept. allegation of misuse and are strongly contesting it. We have every reason to believe the original charge will be rescinded. Our agency used those funds for a valid and laudable reason—to provide security to the residents of our public housing developments.

Carlos Jackson
Executive Director
Community Development Commission
County of Los Angeles
Monterey Park, Calif.

WHY A DESIGN-PROTECTION BILL WOULD PROTECT MOTORISTS

Your position on House Resolution 1790, the Design Innovation & Technology Act, did not cover the total issue, especially in relation to collision repair parts ("This design-protection bill needs remodeling," Top of The News, May 4). The impact of the nation's lack of design protection manifests itself in the increased use of imitation "crash parts" of questionable quality for collision repairs, which jeopardize the vehicle investment of millions of consumers each year. This poses a serious threat to the quality and customer satisfaction standards we at Ford Motor Co. have worked so hard to achieve.

Your commentary also suggested that the legislation would provide vehicle manufacturers an advantage only the marketplace should confer. Please consider these facts relating to the market:

- National surveys consistently show that consumers overwhelmingly prefer original equipment (OE) crash parts for repairs to their vehicles, when they are given a choice.

- National surveys consistently show that collision repair professionals over-

CORRECTIONS & CLARIFICATIONS

A reference in the article "Can corporate America get out from under its overhead?" (Industries, May 18) incorrectly identified overhead costs from a survey of manufacturers in the U.S., Western Europe, and Japan as percentages of sales. In fact, as stated in the accompanying chart, the figures referred to percentages of manufacturing cost.

whelmingly prefer to work with OE crash parts.

Finally, the assertion that "There is no inventiveness in the design of... a fender" is simply wrong. We invite you to explore the huge investment necessary to design, engineer, test, and manufacture a unique vehicle capable of meeting the demands in today's market and at the same time provide the consistent quality that meets or exceeds customers' expectations. Each body panel is integral to a vehicle's design and appearance.

As long as offshore imitators are free to "cherry-pick" the highest-volume crash parts without incurring any up-front design and engineering expense and, with the assistance of insurers, force the substandard products onto our customers' vehicles, the need for strong protection legislation will continue.

J. D. Carey
Marketing Manager
Ford Motor Co.
Dearborn, Mich.

CINCINNATI MILACRON MAKES ITS SHARE OF HIGH-END TOOLS

In regard to "One takes the high-end road, the other takes the low" (The Corporation, May 18), you mislead your readers into believing that we are following a dangerously narrow strategy, focusing on the "low-end" market for standard machine tools. Three-quarters of Cincinnati Milacron's machine-tool business remains in the high end—in particular, aerospace and special-machine tools—markets in which we enjoy a very strong position worldwide.

Nor did you mention that half of Milacron's business lies outside of machine tools, where we've enjoyed consistent success in plastics machinery, precision abrasives, and metalworking fluids. For the record, standard-machine tools, while an important part of our overall strategy, make up only 12% of Cincinnati Milacron's business.

We have a thriving business building highly applied, customized machine tools and advanced manufacturing cells,

which in turn provide our customers with very comprehensive solutions to their manufacturing requirements. In fact, Cincinnati Milacron adopted a philosophy of "solutions not just machines" in 1913, when we created a "sales engineering" department, a concept subsequently copied widely throughout the machine tool industry.

Daniel J. Meyer
Chairman & CEO
Cincinnati Milacron Inc.
Cincinnati, Ohio

SCRUBBING UP THE EPA'S SUPERFUND RECORD

Regarding your article "The top mess called Superfund" (Top of The News, May 11), it is true that 84 of 1,245 priority sites have been cleaned up, but this is a serious understatement of the actual progress in environmental improvement. Over the past 11 years, the Environmental Protection Agency has identified over 30,000 potential hazardous waste sites. We investigated each site to determine whether serious risks exist and to identify the best course of action to take where necessary. To date, the EPA has completed environmental cleanup at over 2,400 of the worst sites in the U.S. Investigation shows that many of the remaining sites can be cleaned up by state or local governments or do not require any action at all.

It is important to note that the 1,245 sites on the National Priorities List represent only a fraction of the Superfund universe. These sites generally have widespread contamination, often involving large amounts of contamination in groundwater. Because of the extent of the contamination and the limitations of available technology, it can take a decade or more for the environment to be restored. This is not surprising considering that contamination accumulated over 30 to 50 years.

The EPA has cleaned up more than 2,000 sites that are not included on the National Priority List. Listing is a formal and time-consuming regulatory process. Some of the most serious sites never make it on the list because we get cleanup finished quickly, making listing unnecessary.

Richard J. Guimol
Assistant Surgeon General
Deputy Assistant Administrator
Environmental Protection Agency
Washington, D.C.

Letters to the Editor should be sent to Reader Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4444. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

**PEOPLE IN THE
COMPUTER BUSINESS
HAVE BEEN TRYING
TO IMPROVE ON
COMPAQ FOR YEARS.**

GUESS WHO

It wasn't easy. Changing a company our size never is. But we listened to our customers, we studied our competitors, we took a long look in the corporate mirror. Then we did the only thing we know how to do. We rolled up our sleeves and went to work.



The result of all this distribution and, naturally, new products. Everything from inexpensive machines for basic computing needs, to advanced products

that stretch the envelope of technology at prices that our customers will find compelling and competition should find well, competitive.

What you won't see are stamped-out, second-rate products with the COMPAQ name stuck at the end of somebody else's assembly line.

While that may be the way of the world, it's not the COMPAQ way.

We've always believed that the performance, compatibility, reliability and actual affordability of a computer has more to do with innovation than with imitation.

So instead of asking

ALLY Did It?

of the world's finest computer engineers forget all they knew about building great computers, we asked them to make all they knew about building great inexpensive computers. Engineering to cost vs. engineering at any cost. And as the best engineers do, they saw this as a limitation, but as a challenge. A hurdle to overcome. A problem to conquer, twist, push, pull and ultimately solve. They questioned manufacturing techniques, challenged our suppliers, they turned every part of every process upside down, inside out

and sideways until they had managed to shake out every unnecessary cost or component.

No more over-think.

No technology simply for the sake of new technology.

And along the way to our new and improved destination, we learned a little something.

We learned that what makes a COMPAQ PC more than just another computer isn't simply the engineering. Or design. Or component quality. Or product testing.

It's not just the more tangible things such as compatibility or near-zero defect production

or the dozens of other examples you'll be discovering for yourself on the following nine pages of this advertisement.

When all is said and done, what truly makes a COMPAQ PC far more than simply another computer is simply passion.

The passion to push technology, the passion to recognize the idea whose time has come, the passion to listen and learn and adapt to whatever our customers may want today while anticipating what they might need tomorrow.

In other words, the passion to do things right for the customer.



AT MOST COMPUTERS STANDS FOR REPLICATION



It's hard to believe, but at some PC companies the engineering department is nowhere to be found. Which stands to reason, since most other computers aren't engineered, they're copied. And, as with all copies, something is frequently lost in the translation.

What happens when companies lack the engineering depth to make new things happen? You guessed it...new things don't happen.

A fact few understand better than the 1200-plus engineers at Compaq.

The same engineers who developed the first portable computer with dual-mode monitor and an industry standard for compatibility. And the world's first desktop PC with concurrent bus.

The same engineers

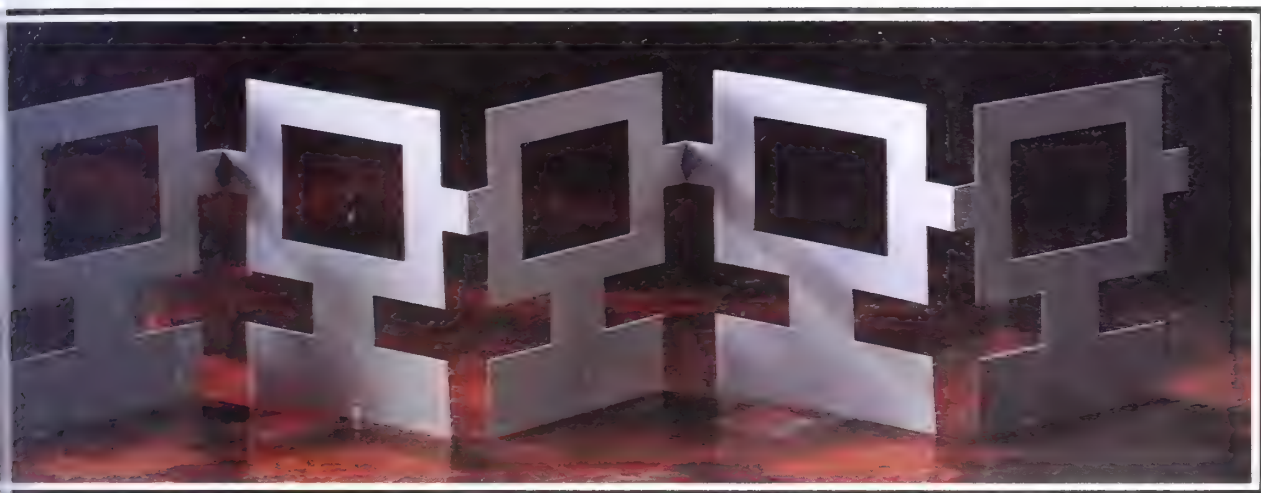
who designed and developed the first 386 And managed to break the 32-MB barrier in hard-drive technology.

Just for starters.

So what have we brought up to lately?

Among other things

COMPANIES, R&D E AND DUPLICATE.



st introduced the
s first lightweight
./25 notebook PC
20-MB hard drive
all desktop expan-
capability.

r engineers have
oped sophisticated
ows accelerators,
nducted extensive
ch and testing to

ize Windows 3.1
rformance on every
PAQ computer. A
t her companies will

no doubt leave you to
perform on your own.

We've even been de-
signing enhanced fault-
tolerance features into
our drive array adapters
to make data reconstruc-
tion and retrieval easier,
more automatic and far
less disruptive to every-
day operation.

As you read this, we're
working on dozens of
new computing ideas.

Some will arrive next

week. Some next year.

Some may change the
way you look at com-
puters forever. Others
will simply make next
year's COMPAQ prod-
ucts work a little better.

And finally, some will
be just the kind of ideas
our competitors have
been looking for.

Ideas that wouldn't
occur to them, however,
until they looked inside
a COMPAQ PC.



VARIETY MAY BE BUT TO A COMPUTER THE KEY

If you've ever attempted to put together a PC network, even one that's relatively simple, you know just what we mean. It can be time consuming. Nerve wracking. Sometimes even traumatic. And that's when everything goes according to plan.

Now obviously, variety is a fact of life when dealing with networks. There's probably not a single LAN that doesn't include a few PCs from one manufacturer, some more from another, and still more from a third. (Not to mention a vast assortment of peripherals, interface cards and operating systems.)

And, being a leading proponent of PC technology, we're certainly

not suggesting that you scrap all your hardware and start from scratch with strictly COMPAQ products.

We do recommend, however, that as your needs expand, you think a little differently about how you approach your next PC purchase.

Because, as you may have noticed, when you put bargain-basement variety components together and subject them

to the increasingly complex demands of today's computer network environments, compatibility problems arise.

It's like being at a cocktail party. Nobody talking to anybody.



everybody blaming the one who brought them all together.

And suddenly your well-thought-out master-minded PC network has turned into a house of cards hit by

THE SPICE OF LIFE, NETWORK, IT COULD BE DEATH.

or stiff breeze.

On the other hand,

it's Compaq.

Unlike other comput-

er companies, we have an

exclusive group of engineers

who are dedicated exclu-

sively to testing network

environments. Working

with the world's major

software companies like

Novell, Banyan, SCO,

Microsoft, and others,

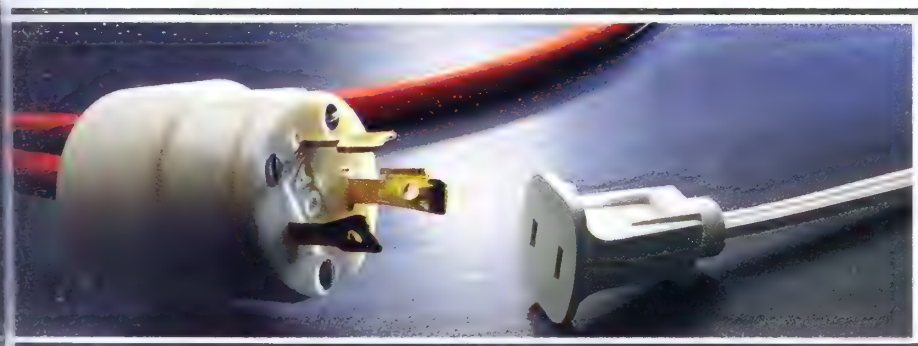
they test all COMPAQ

products in very active,

multi-user environments

for network installations.

As a result, you can be assured you're getting products designed, engineered and thoroughly tested to operate within the most complicated network environments.



communication hard-
ware and software.

In addition, we have

a team of engineers who

continually monitor the

day performance of

COMPAQ computers

in various network

for hours, days and even
months on end.

To make integration easier, we offer COMPAQ TechNotes and ToolKits, the most sought-after guides in the computer industry for multi-vendor

In short, products built by a company dedicated to solving potential PC network integration problems in our offices.

That way you don't end up having to solve them in yours.



WHAT YOU DO WITH A C THE FACT THAT YOU MIC

Not too long ago, Denise Anderson of Morrison, Colorado, left her COMPAQ notebook PC in, of all places, her driveway. When next seen, the 6.9-pound computer had become a speed bump for 1.3 tons of automobile. When next used, it started up just fine.

Now, that may have been a bit surprising to Denise, but at Compaq, the engineering department didn't so much as raise an eyebrow.

After all, when a PC is designed to withstand

the slings and arrows of today's business world, a small thing like a minor traffic mishap is all in a day's work.

If you walked into the Compaq testing laboratories, what you'd see

is a computer owner's worst nightmare.

Computers subjected to the kinds of conditions you would encounter during the height of summer in the Sahara. Or midnight in an Arctic winter.

Humidity, temperature, power-cycling and thermal-shock tests performed while the units are up and running, not just



PUTER IS YOUR BUSINESS. ACTUALLY DO IT IS OURS.

few hours, but for
and weeks to simu-
years of normal use.
keyboards that are
added and punched
ons of times, often
dust, dirt, ashes
other kinds of con-
nants dumped into
workings.
portable computers
opened and closed
20,000 times to en-
the integrity of the
es. And dropped
and over again
terrifying heights,
onto their most
rable corners.
st to make sure
our notebook PC
rvive a couple of un-
led hours stuck in

the trunk of your car. Or
the power surges of your
electrical system. Or
even an occasional heavy-
handed operator.

But the important
part of the story isn't
simply that we put our
products through one of
the most rigorous testing
programs in the entire
computer industry.

The important part
is they survive it.

That means reliabili-
ty and serviceability are
designed into the prod-
ucts, not added on as
an afterthought.

It means thermal sim-
ulations to determine
the best locations for
components and cooling

devices. And electrosta-
tic discharge protection
integrated into the sys-
tem from the start.

It means consistency
of component quality
from one production
run to the next. And to
the one after that.

It means, quite sim-
ply, that the ultimate
goal of every Compaq
engineer is to design a
product that works, and
keeps on working, no
matter what.

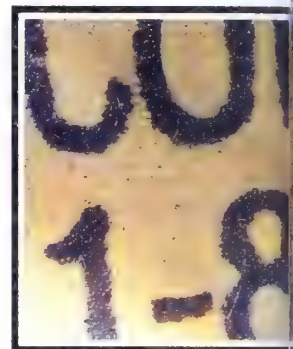
A product, in other
words, that won't break
down under the pres-
sures of today's complex
business world.

Even when the pres-
sures come to 1.3 tons.



FOR SERVICE AND SUPPORT ARE NOT STANDING

With our new service and support program, what you need is what you get. In fact, our technical support staff resolves 95% of all calls in under 15 minutes. And for questions that require greater expertise, we have engineers ready to get on the line.



All of which is just part of CompaqCare, a comprehensive new program designed to provide you with everything you may need when it comes to service and support. Quickly and easily.

Our free on-site* one-year, limited warranty, for instance, will cover practically anything that could happen to any of your COMPAQ hardware, anywhere it occurs in the U.S.A. or Canada. And, unlike most of our

competitors' programs, the new Compaq on-site warranty covers every product we build.

And no matter where you take COMPAQ portable or notebook PCs, they're also backed by a worldwide, one-year, carry-in warranty.

So wherever business takes you—from Tokyo to Turkey, Britain to Berlin—you can feel perfectly comfortable taking your COMPAQ portable along with you.

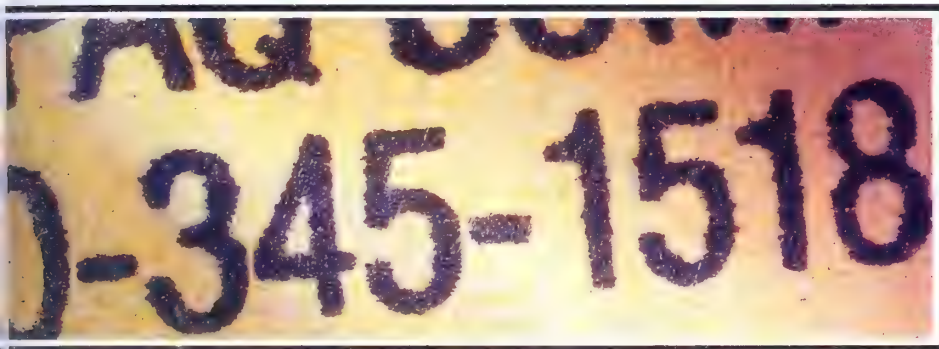
We also give users the flexibility to choose from over 2,000 Authorized COMPAQ Reseller service locations.

Or you can call on us directly for service.

For companies with technicians already on board, we offer a self-maintainer program that gives you access to all the support resources you need to perform whatever service you may find necessary.

And, of course, while

E, JUST CALL. OPERATORS Y. ENGINEERS ARE.



creasing the scope of
warranty programs
certainly been our
priority, we've also been
working on many other
important aspects of
customer support.

Whenever you have
questions, for example,

Compaq SMART
system provides all our
support personnel with
sophisticated informa-

a bank comprised of
thousands of hours of
troubleshooting and
engineering expertise.

Which means the person
who answers your call is
certain to supply you
with consistent, smart
answers to all of your
questions. And take care
of even your most press-
ing problem. We even
have on-line access with
most of the major soft-
ware companies to help
you quickly take care of
those software-related
difficulties that you may
encounter.

You'll also gain 24-
hour electronic support

through three different
services: CompuServe,
PAQFax, and QuickFind,
our CD-ROM technical
reference library.

If, after all of the
above, you're still not
quite convinced that our
new service and support
program is one of the
most comprehensive in
the industry, call us on it.

1-800-345-1518.

On the other end of
the phone, you'll find a
whole bunch of people
looking for trouble.



A THOUGHT FOR THOSE WHO APPRECIATE THE VALUE OF A DOLLAR AS WELL AS THE VALUE OF A COMPAQ.

"Now that we've made clear all the things that Compaq stands for, let us make it clear what we won't stand for anymore. High prices. We have a new mission. A new goal.

To provide you with Compaq quality, Compaq research and development, Compaq reliability and testing and service and support at the most competitive prices possible.

In other words, products that are exactly what you need, easy to find, and priced right.

That's what Compaq is all about today.

For the details on all of

the above, yes even the prices, give us a call at 1-800-345-1518, Ext. 205, in the U.S., 1-800-263-5868, Ext. 205, in Canada.

We think you'll like what we have to say."

—Eckhard Pfeiffer

President, CEO

Compaq Computer Corporation



*This service is provided by contracted service providers and may not be available in certain geographic locations. Contact the Compaq Customer Support Center for further details. © 1993 Compaq Computer Corporation. All Rights Reserved. Printed in the U.S.A. COMPAQ, DESKPRO, SYSTEMPRO, Registered U.S. Patent and Trademark Office. QuickFind, PQFax and Compaq are trademarks of Compaq Computer Corporation.

KEY OF THE MIND: BORROWING AND LENDING IN AMERICA FROM THE CIVIL WAR

MICHAEL MILKEN

James Grant

War Straus Giroux • 513pp • \$27.50

ENDING LUNACY: IN AMERICAN TRADITION

Just weeks ago, tottering Olympia & York Developments Ltd. was dicker- ing with its lenders for more lenient as on the \$12 billion or so it owed. Bankers—from Citicorp and many other top commercial banks—balked, in part because the real estate giant refused to fully open its books. At the same time, the lenders feared the bankruptcy filing that happened on May 14, they were unsure of what collateral they could claim for their existing loans. Think about it. Here's a borrower that

probably owes more than the gross national product of many small countries, and the lenders don't know what the borrower's balance sheet looks like.

How could it happen? The quick but rather unsatisfying answer is that bankers are fools. A more complete explanation can be found in James Grant's *Money of the Mind: Borrowing and Lending in America from the Civil War to Michael Milken*.

This isn't just another in the long line of books chronicling the indulgences of the 1980s. Grant, editor of *Grant's Interest Rate Observer*, believes that the recklessness of that decade was not aberrant behavior but part of a tradition hailing back a century or more. In historical context, the foibles of O&Y's lenders are understandable and predictable.

Grant explains overleveraging as a manifestation of periodic bull markets in credit, which seem to get a little more hectic with every cycle. Credit, he notes, is "money of the mind"—just a promise to pay. And during a bull market in credit, the recent "credit crunch" is a bear market, and loans become ever easier to get and borrowers take them for ever more speculative purposes. "Expecting to get a loan on easy terms, people may change their behavior," Grant writes. "They may spend more, or pay a higher price, than they would otherwise do."

Grant documents how each generation of lenders trips itself up. In the 1970s,

for instance, Citicorp Chairman Walter B. Wriston, asserting that countries don't go bankrupt, proceeded to lend billions to deadbeat borrowers in the Third World. So did other big banks. Never mind that Brazil and Peru had each defaulted three times before.

In a discussion of the 1970 collapse of Penn Central Transportation Co., Grant observes that "progress in financial affairs is cyclical, not cumulative. Putting a man on the moon, scientists had stood on the shoulders of giants. Overleveraging

gone too far, Grant argues, when anyone can get a credit card, vanquish debts in a bankruptcy proceeding, and, without any social stigma, run up debts anew.

Grant also believes that the "socialization of risk" by government has led lenders to lunacy. He makes the argument, often heard in recent years, that federal deposit insurance was a grievous mistake that made depositors indifferent to banks' financial health. If bankers made bad loans, so what? The government would pay off the depositors.

As readers of his fortnightly newsletter know, Grant has been pounding these themes for years. Unlike many lenders and bond buyers, he spent the 1980s poring through financial statements and crunching numbers and wrote incisive analyses of credit issues in his newsletter and occasional op-ed pieces. Although junk-bond devotees paid little heed, the financial press—and some of the more sober sorts on Wall

Street—took note of his work, which was not only readable but amusing.

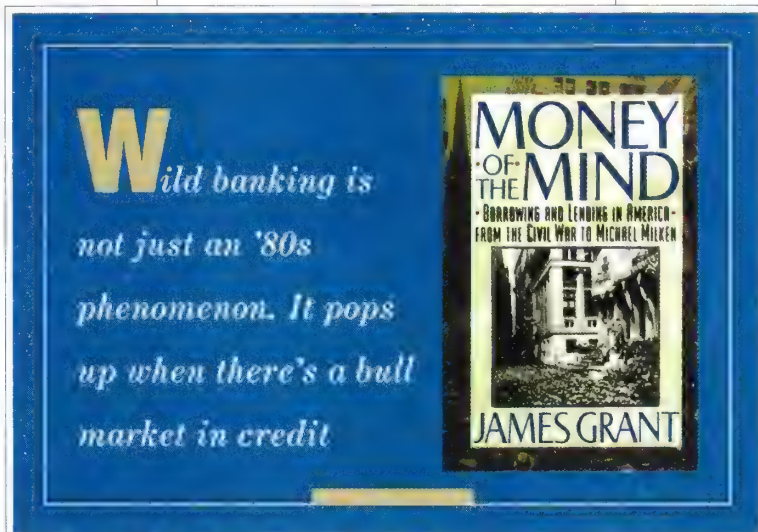
Money of the Mind, however, is not entertaining. It's so painstakingly researched and meticulously documented that the reader can almost smell the musty archives Grant scoured. With that much detail, it's often difficult to read. Only in the chapters covering recent times does the pace pick up. Readers might do best to absorb each chapter like the newsletter—one every couple of weeks—rather than tackle the book cover to cover.

What's more bothersome is that Grant takes Shakespeare's admonition, "Neither a borrower, nor a lender be," too much to heart. His heroes are bankers who were loath to lend. And he finds little about consumer credit he likes. But how much would the economy have grown without access to home mortgages, auto loans, even credit cards? There's nothing wrong with credit—as long as it's granted with a clear head and sober expectations.

That quibble aside, the book is worthy and should be required reading for bankers and bond investors. Who knows? Had *Money of the Mind* been available to O&Y's lenders a few years ago, they might have demanded to see a financial statement before they lent out billions.

BY JEFFREY M. LADERMAN

Associate Editor Laderman hopes he'll never need the amount of credit that bankers he doesn't know are willing to grant him.



to Penn Central, bankers had recreated the errors of their fathers."

But it's not just bankers who have short memories. Investors burned by junk bonds learned no lessons from the historical debacles involving other so-called high-yield bonds. In the late 1800s, investors bought 100-year bonds of railroads that went bust long before they matured. A period remembered for stock market excesses, the 1920s were also a high time of high-yield foreign-government and real estate bonds. Then came the Depression, many foreign borrowers could not pay their debts, and the real estate market collapsed, too.

Of course, lenders and borrowers don't make billion-dollar blunders all by themselves. Indeed, the government initially urged banks to get into consumer lending to fight loan sharks, for many years the worker's only source of credit. But the "democratization of credit" has



At 5:30 in the morning, little Katie McDonagh jumps out of bed, has a light breakfast, dresses, and then gets her room out of bed to drive her to the gym. That's because every day before her school day begins, Katie spends two hours jumping, vaulting and stretching her way to a team. A dream that always ends the same way. Katie, standing on a pedestal, handing her heart, watching the American flag being raised to celebrate her triumph at the Olympic Games. Pretty big dream.

Because for years we've known what it takes to be committed to a worldwide goal. You see, we also have a wish. Although it has nothing to do with gold, silver or bronze.

For years, Canon has dedicated its corporate resources to heightening the awareness and responsibility of nations for the care and preservation of the world's environment. It's this dedication that is leading to the development of a new clean manufacturing process for camera lenses—a process we plan to share with other optics

It's never too early.

Especially for a seven-year-old. But to reach a worldly goal like this takes a dedication to such lofty dreams.

At Canon we believe that dreams can become reality. That's why we've been proudly supporting young athletes for decades. And why we're proud to be The Official 35mm Camera Sponsor of the 1992 U.S. Olympic Team.

OFFICIAL 35mm CAMERA SPONSOR
OF THE 1992 U.S. OLYMPIC TEAM



makers. This awareness also led to our involvement with the United Nations Environment Programme, a worldwide photographic competition which is designed to help bring the preservation of our natural resources and the protection of our environment to a global audience. Because at Canon, we believe that if you're going to make a world of change it takes more than a dedication. It takes a dream.

Canon

WHAT WILL SET LATIN AMERICA FREE? FREE ENTERPRISE

BY PAUL CRAIG ROBERTS



Mexico, Chile, and Argentina have already made great strides toward privatization. Now, the region must continue to make economic reforms—not depend on a free-trade pact as a panacea

In a development as extraordinary as the collapse of communism, the mercantilist economy, run for the benefit of favored political elites, is disappearing in Latin America. Today, Argentina, Chile, and Mexico have the confidence to seek free-trade agreements with the U.S.—although it is not clear that the U.S. has the confidence to grant them.

This is a big change from only a few years ago, when the ruling dogma in development circles on both sides of the Rio Grande was that private trade and investment would simply allow the Yankee imperialist to ravage Latin America. As the argument went, if not protected by development aid and planned policies of import substitution, Latin America would become a colony with permanent balance-of-trade deficits, while U.S. capital removed the economic surplus.

These doctrines were pernicious because they robbed Latin Americans of capitalist economic institutions and the confidence to build them. Foreign aid and development planning concentrated the profitable opportunities in the hands of government and led Latin American societies to coalesce into redistributive combines seeking special privileges and economic protection. Nationalist myths and protectionist doctrine became a veil that covered the parceling out of favors to the politically favored. The most important human-capital investment was education in how to bribe government officials.

The U.S. squandered a historic opportunity in the postwar period to transmit the ideas of free markets and free enterprise to Latin America. Instead, the \$400 billion in development aid dovetailed with the mercantilist tradition of government control and strengthened the institutions of the patriarchal state. Only 2 of the 197 development projects in Brazil financed by the World Bank over a 30-year period were in the private sector.

ABOUT-FACE. Recently, Argentina, Chile, and Mexico have changed course and undertaken domestic-policy changes that establish favorable business climates. A few years ago, Mexico was an economic basket case. Now, it is enjoying the best-performing stock market in the world. President Carlo Salinas de Gortari's administration has cut taxes, lowering the top rate on personal income to 35% from 60%. Laws governing investment have been liberalized, and 900 state companies have been privatized. A deregulation campaign is under way.

Chile has virtually completed its transformation from impoverished socialism to a market society based on private property. More than 350 state companies have been privatized, and the social-security system is being replaced

with privately owned pension funds that can be passed on to heirs. Chile is even privatizing its national health system.

With privatization of the state telephone company, Argentina has also begun substituting private equity and the market for public debt and planning. Economy Minister Domingo Cavallo has announced a deregulation program in order to eliminate the bribes that comprise the special "Argentine cost" of doing business.

The old economic myths have lost their power, and cutting-edge scholars in Latin America no longer believe that the region suffers from too much capitalism. Salinas dismisses as "reactionaries" those who "would like to see the return of the excessively proprietary, expansive state."

Meanwhile, north of the border, the doctrine of import substitution is alive and well. Democratic Party policy circles funded by labor unions. In recent years, a statist Republican Administration has imposed massive regulatory, tax, and legal costs on investment sited in the U.S. Labor, being much less mobile internationally than capital, now fears global competition more than ever. The rapid pace of regulation and tort liability are undermining the dynamic nature of the U.S. economy. We are in danger of becoming a reactionary force in world economic affairs.

FREE-TRADE PITFALLS. Latin Americans hope to complete their economic transformation with a free-trade agreement with the U.S. Some even see it as a panacea. However, overvaluing a free-trade agreement could be a mistake: Latin Americans might accept conditions that would be counterproductive, such as adopting our regulatory policies and tort liabilities to meet U.S. demands for a level playing field.

Alternatively, governments with deep roots in the patriarchal economy could come to regard the benefits of a free-trade agreement as a subsidy that would compensate for the cost of maintaining inefficient institutions, and internal reforms could wither.

Success in Latin America depends on the continuation of the domestic reforms that make countries attractive to investment capital. It was internal change—not a free-trade agreement—that brought progress to Chile, Mexico, and now, perhaps, Argentina. Success in stabilizing the currency and advancing private property are transforming these once crisis-ridden countries into entrepreneurial societies. If Latin Americans continue to create economic liberty, one day the emigration may reverse, as *los gringos* flee south seeking opportunity.

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

PROGRESS. WITHOUT COSTING THE EARTH.

FIAT'S PRESENCE AT THE EARTH SUMMIT '92

Certain appointments can never be missed. The Earth Summit at Rio de Janeiro is one of them. Because, at stake, is the future of our planet. The Fiat Group is present and believes it can help.

How?

By reconfirming its commitment to the realisation of environmentally friendly manufacturing processes and products.

By showing faith in the exchanges of experience with other like-minded protagonists from all over the world.

By contributing to the definition of a new set of rules which must govern the future behaviour of man in his environment.

The Fiat Group has already taken action to help the environment. Its corporate policy aims to anticipate legislation rather than wait for it and follows three fundamental principles:

"Avoid pollution, avoid waste and optimize the use of resources".

It is a commitment to the world we live in. For progress in harmony with the future.



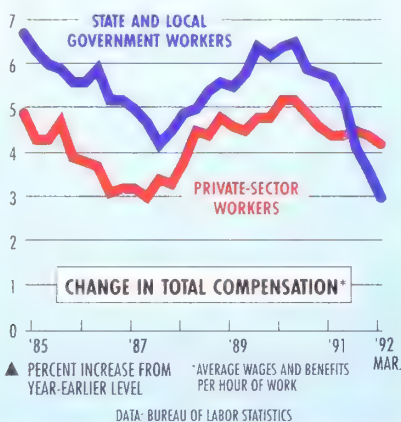
BY GENE KORETZ

GOVERNMENT WORKERS START SAYING 'SO LONG' TO HEFTY RAISES

To taxpayers faced with higher local taxes and reduced services, one of the most disquieting aspects of the fiscal woes plaguing states and cities has been their relatively generous pay provisions. Average pay hikes awarded to state and local government workers have consistently outstripped those won by private-industry workers for years (chart). It's only recently that the pendulum has swung in the opposite direction, with total compensation for state and local government workers up just 3% in the 12 months ended in March, far below the private-sector gain of 4.2%.

Economist William C. Melton of IDS Financial Services Inc. is elated by the

STATES AND CITIES HAVE BEGUN TO TRIM PAY HIKES



sharp turnaround. "With government now leading the way in restraining labor costs, the odds favoring further progress on inflation are growing," he says.

Economist Alan B. Krueger of Princeton University is less sanguine. "State and local government pay trends are extremely responsive to economic conditions," he says. "So once the recovery picks up, they are likely to outpace those in the private economy again."

A development that could slow a return to past patterns, however, is rising public concern over the pay gap between the two sectors. According to one measure, total compensation per full-time-equivalent employee, state and local government workers have been running about 10% ahead of their private-industry counterparts. But a new gauge released by the Bureau of Labor Statistics suggests that the gap is far larger, with

state and local government workers averaging \$22.31 of compensation per hour worked in March, 1991, compared with \$15.40 in private industry.

Such measures probably exaggerate the pay differential, since they don't take into account different mixes of skill levels in public and private sectors. But there seems little doubt that civil servants on average are ahead of the game, especially in the area of benefits such as pensions and health coverage.

While some observers attribute government workers' success on the pay front to the fact that they're highly unionized and to their voting leverage in elections, Krueger and Lawrence F. Katz of Harvard University point to another factor: the strength in pay of low-skilled government workers—those with less than a college education.

"In the 1980s," says Krueger, "the real wages of less-skilled workers in the private sector fell sharply, holding down average compensation increases. But in the public sector, perhaps due to union pressure, they suffered much less erosion, so average pay rose more rapidly."

Krueger believes the relatively strong position of less-skilled government workers will once again push up average compensation in the public sector faster than in private industry once the recovery takes off. "Though most low-skilled workers will continue to take a beating," he says, "they will hold their own in government."

But William Melton thinks another reversal may still be years away. "At the very least," he says, "the sharp deceleration of government pay should last for the rest of this year and 1993."

EVEN WITH PRICIER OIL, INFLATION SHOULD STAY IN CHECK

Consumer prices, which rose a scant 0.2% in April, will be up 0.4% in both May and June, hitting a 5% annual rate. So predicts economist Donald Ratajczak of Georgia State University.

"Energy prices, which were increasing more than seasonally for gasoline and fuel oil even before Saudi Arabia decided to push up OPEC prices, are now soaring," explains Ratajczak. He notes that petroleum product prices rose by nearly 3% in May, and he expects them to climb an additional 5% in June.

The good news is the longer-term outlook remains positive. Although Ratajczak expects the \$3-per-barrel increase in oil prices to push consumer prices up 3.6% this year, instead of the 3.3% he had been projecting, that's still a modest

increase. And he notes that core inflation (prices less food and energy), which hit 4.4% last year, is still falling and should come in below 4% in 1992.

WALL STREET GIVES THUMBS UP TO U.S. DEALS IN EAST EUROPE

Although most former Soviet bloc nations are mired in recession or even depression, the pace of U.S. investments in Eastern Europe has been rocketing. And according to Larry P. Lang and Eli Ofek of New York University, the stock market has been giving its blessing to such ventures.

The two researchers looked at the impact of 61 recent announcements of investments in Eastern Europe on the stocks of the U.S. companies involved. On average, they found that such announcements pushed up a stock's price by about 1% (or an average of \$64 million per company) relative to the stock market as a whole in the two days following which the announcements were made and subsequently published. In contrast, news of U.S. investments in joint ventures in Western Europe had no significant effect on stock prices.

AMERICAN STUDENTS ARE FALLING BEHIND FASTER THAN EVER

One measure of the lagging performance of the American education system is how many students in various age groups are either enrolled below their appropriate grade in school or have dropped out. And by that standard, the statistics released by the Census Bureau are hardly encouraging.

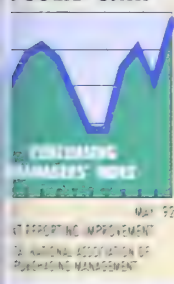
The agency reports that the percentage of white, black, and Hispanic children ages 6 to 8 enrolled below their appropriate grade rose from 15% in 1980 to 22% just 10 years later. The 1990 survey also indicated that by the time they were 15 to 17 years old, some 35% of U.S. students had either been left behind or had dropped out of school. This included 32% of white students and close to 50% of black and Hispanic students.

Census officials note that "a great deal of falling back occurs at an early age for black and Hispanic children," with the percentage behind in school hitting 33% to 35% among 9- to 11-year-olds. What's more, among black students, the percentage behind or out of school continues to rise steeply, reaching 46% for the age 12 to 14.

PLENTY OF SOLID PLAYERS -BUT NO MVP TO LEAD THE CHARGE

What this economy needs is a Michael Jordan, the star forward who is leading the Chicago Bulls against the Portland Trail Blazers for the basketball championship. The problem: Each part of the economy is trying to keep the recovery on track, and no one sector can be depended on to perform consistently enough to carry the upturn all the way. Consumers racked up a big score in the first quarter. They increased their spending at a strong 5.4% annual rate. But they threaten to spend this quarter on a lull if hiring and income growth don't pick up.

INDUSTRY SCORES A SOLID GAIN



Instead, consumers have passed the ball to the industrial sector. The consumer-led jump in domestic demand has cut inventories sharply. So, manufacturers will have to begin restocking their warehouses soon. Already, factories are stirring to life this quarter (chart). And the activity could drum up some big momentum for the overall economy if increased production

leads to expanding payrolls. The recovery may get less help from the building sector in coming months. Housing, which had been a consistent scorer for this economy, is now showing signs of lagging. And the increased activity from homebuyers had been offsetting the heavy drag from commercial real estate.

COND K AT FIRST QUARTER

The economy performed better in the first quarter than originally thought. The Commerce Dept.'s revisions to the real gross domestic product showed economic growth at an annual rate of 2.4% last quarter, instead of 1.7% first reported. Consumer spending and business orders for plants and equipment were revised higher, but some of those gains were offset by a deterioration in the foreign-trade sector.

The biggest addition to GDP growth, though, came from inventories. Businesses liquidated their stockpiles at a much slower pace than first suspected. A smaller decline in inventories is a plus for GDP growth. Heading into the second quarter, businesses were still cutting their stock levels, but that trend is unlikely to continue. Factory inventories fell 0.3% in April, even as sales increased 0.2%, and new orders rose 1%. The recent trends pushed the ratio of inventories to sales to 2.1—one of the lowest readings in the postwar era.

With inventories low, companies won't be able to dip into their warehouses much more to meet demand. Instead, they will have to start speeding up assembly lines.

That may already be happening. The National Association of Purchasing Management's index of business activity surged to 56.3% in May, from 51.3% in April. Purchasing managers reported significant improvement in output, orders, and jobs in May. The steady rise in the NAPM index indicates that the factory sector is recovering fast enough to lift the overall economy.

The NAPM report also suggests that inventories may have started to grow in May. The NAPM's index of inventories rose to 49.2% in May, a reading which the group says is generally consistent with growth in factory inventories as measured by the government. Businesses are likely to rebuild their stock levels—and increase output—as long as they foresee demand rising.

COMPANY EARNINGS START TO SHINE

One area that may perk up is business investment. Stringent cost-cutting last year and a stronger economy today are helping to lift corporate earnings.

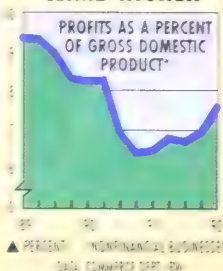
Operating profits from current production in the first quarter rose by 9.9%, or \$31.4 billion, from the fourth quarter, to an annual rate of \$347 billion. That was the biggest gain in five years. Profit margins for nonfinancial businesses—earnings as a percent of output—snapped back to 7.6% in the first quarter (chart). Margins haven't looked that good since the recession began.

And because of sharply lower interest expenses, corporate cash flow improved by \$21.2 billion. Companies are likely to use that money to buy new equipment or to add more workers.

That's important to the outlook, especially since the recession took a bigger toll on workers than first thought. The Labor Dept.'s long-awaited revisions to job growth show that 2.1 million jobs were lost from June, 1990, to February, 1992. Originally, 1.7 million jobs were thought to have been eliminated. Reversing these losses would certainly brighten the outlook for consumer spending, which accounts for some two-thirds of GDP growth.

To be sure, consumer demand will add to growth in coming quarters, but it won't pack the same wallop as last period's jump. That's because spending can only increase as fast as income growth allows. And income

PROFIT MARGINS CLIMB HIGHER



Business Outlook

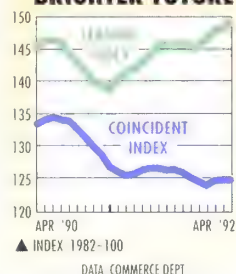
gains will be modest this year, since labor markets are only now perking up, and companies will hold down costs by exerting downward pressure on wages.

CONSUMERS COULD USE BIGGER PAY GAINS

Personal income rose only 0.1% in April. And after adjusting for inflation and taxes, real disposable income fell 0.2% in April, after 0.6% advances in February and March. Consumer spending was equally sluggish: Inflation-adjusted buying was up only 0.1% in April.

Demand for goods was flat in April. Durable-goods purchases dropped 0.8%, offsetting a 0.3% gain in nondurables. The weak showing suggests that retail sales for April, originally reported to have risen by a strong 0.9%, may be revised much lower when Commerce releases its next retail-sales report on June 11.

DULL PRESENT, BRIGHTER FUTURE



Consumer outlays began this quarter a bit below their first-quarter pace. But consumers are feeling better about the economy, and that optimism should translate into spending gains in coming months.

Car sales are already picking up. New U.S.-made cars sold at an annual rate of 6.3 million in May, up from April's uninspiring 6 million pace.

The government's own set of forward-looking data shows that the recovery will pick up steam. The index of leading indicators rose 0.4% in April (chart). That was the fourth solid gain in a row for the index. The index of coincident indicators—which tracks the current path of the economy—is not faring as well. It was flat in April and remains far below its showings of 1990 and 1991.

One worry is construction. Home buying weakened in March and April, and that may slow the rebound in homebuilding. In April, new single-family home sales

inched up by 1.3%, to an annual rate of 530,000 (chart). But sales had plunged nearly 16% in March, so home sales are sharply below their first-quarter average.

Sales probably picked up again in May. That's indicated by last month's small rebound in mortgage applications for home purchase. The big reason more people were buying homes in May than in April was affordability: Mortgage rates, which had risen above 9% in early April, were back to 8.73% in late May.

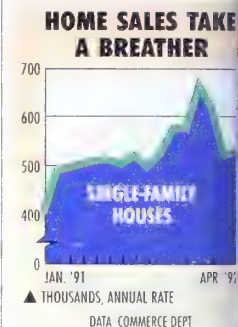
The softness in the housing market, however, may slow the homebuilding recovery. That means the entire construction sector could be a weak link in the second quarter. Total construction spending fell 0.3% in April. Only outlays for residential buildings rose, by 1.8%.

Commercial construction continues to show no signs of recovery. Spending in that sector fell 1.1% in April and is down 19.3% from a year ago.

The decline could get even steeper. The F.W. Dodge Div. of McGraw-Hill Inc. reports that new contracts for construction fell 2.9% in April, on top of a 4.8% decline in March. Non-residential contracts slipped 0.5%—their fifth drop in the past six months.

So far, the slump in commercial building has been offset by residential construction. In fact, the increases in housing have boosted growth in the overall economy for a year now. But the pause in home buying in March and April hints that builders may sit out this quarter.

That doesn't mean the second quarter will be a loss. The industrial sector seems ready to pick up the pace. If housing falters, and consumers aren't out of the game either. The economy may not produce any superstar players this year, but as long as most sectors keep rebounding, the recovery should score a solid victory.



THE WEEK AHEAD

PRODUCER PRICE INDEX

Thursday, June 11, 8:30 a.m.

Producer prices for finished goods likely grew by about 0.3% in May, say economists surveyed by MMS International, a division of McGraw-Hill Inc. That's suggested by higher fuel costs. Producer inflation continues to pose little threat to the economy. The expected May gain follows milder increases of 0.2% in each of the three previous months. And in the 12 months ended in April, finished-goods prices rose by only 0.9%.

RETAIL SALES

Thursday, June 11, 8:30 a.m.

Retail sales probably increased by a healthy 0.5% in May, says the MMS re-

port. A gain in car and light-truck sales led the pickup in store shopping. Retail sales were reported to have increased by 0.9% in April, helped in part by a late Easter. However, the dismal showing of consumer spending on goods suggests that the April retail data may be revised lower. The meager growth in personal income means the increases in retail sales during this upturn will be weak compared with typical recoveries.

CONSUMER PRICE INDEX

Friday, June 12, 8:30 a.m.

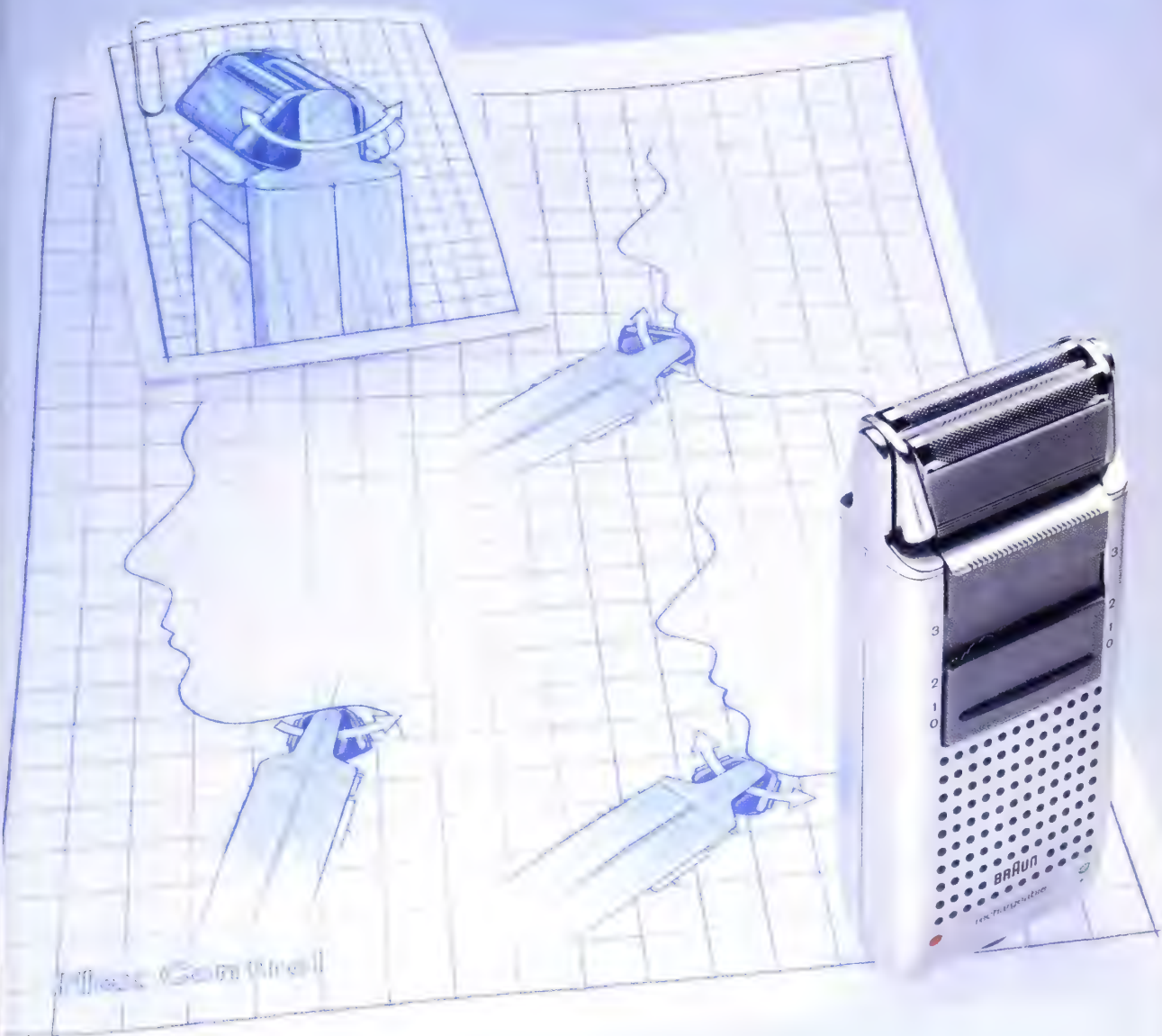
The MMS consensus forecasts that consumer prices rose by 0.3% in May, a bit faster than the 0.2% advance in April. Higher gasoline costs will account for most of the acceleration. Excluding food

and energy, prices probably rose about 0.3%, the same increase as April. Even with the expected bigger increases in all prices in May, inflation at the consumer level is running at a modest 3.3% annual rate.

BUSINESS INVENTORIES

Friday, June 12, 10 a.m.

Inventories held by manufacturers, retailers, and wholesalers probably changed little in April. Factories had already reported a 0.3% drop for the month. Business inventories grew 0.4% in March, mostly because of a gain in retail stock levels. Business sales probably increased by 0.5% in April, following a 0.9% rise in March and a 2.2% jump in February.



The new Braun Flex Control.

Its pivoting head is designed to conform to your face...like no other shaver before it.

Your face has many different angles and curves. Braun has introduced Flex Control—the first electric shaver with a pivoting head.

It automatically adjusts

itself to each curve on your face, always maintaining the optimal shaving angle. To deliver Braun's closest shave ever.

And with the twin foil coated in platinum, the

shaver glides smoothly and effortlessly across your face.

Simply because when it came to making a better shaver—we first studied your face.

And then we designed

the Braun Flex Control accordingly.

BRAUN

Designed to perform better.

Even Perot's cash plays well with many voters, who like the notion of 'a billionaire who gets things done and can't be bought'

VOTERS UNSATISFIED WITH THEIR CHOICE OF PRESIDENTIAL CANDIDATES THIS YEAR

71%

TIMES-MIRROR POLL



THE CAMPAIGN

JUNE 15, 1992

THE YEAR OF THE THIRD FORCE

'THE BIGGEST CHALLENGE TO THE TWO-PARTY SYSTEM SINCE THE CIVIL WAR'

"They say I'm buying the election. I'm buying it for you."

— H. Ross Perot, May 29, Orlando

Any election, particularly one illuminated by the bonfires of voter rage, produces its share of *bons mots* and malapropisms. But for sheer, surpassing strangeness, it's hard to top Texas billionaire Ross Perot's vow to make the American people a present of the Presidency.

Perot's pledge, and the wild enthusiasm of his growing army of supporters, aren't all that's odd about Campaign '92. Although he has never held office, Perot has vaulted into first place in the Presi-

dential race, according to a recent ABC News/*Washington Post* poll. Polls taken during the concluding round of June 2 primaries confirm those results in California and Ohio. What's more, a third of those who voted for George Bush or Bill Clinton in those contests may switch to Perot in November.

If that show of strength wasn't enough to scare the Establishment, the Perot campaign's moves on June 3 should have been. That day, Perot brought on former Reagan campaign chairman Edward J. Rollins and Hamilton Jordan, Jimmy Carter's political whiz kid. Suddenly, it's not so hard to imagine a Perot victory in November or

a deadlocked election in which the winner is selected by the House of Representatives. Meanwhile, on Capitol Hill, voters' fury at political careerism and check kiting has triggered a mass wave of retirements. The departures will create massive turnover in congressional committees, especially if there's an incumbent bloodbath come November.

Only a year ago, pundits viewed this year's election as a yawner, thanks to the popularity of the Persian Gulf war and the minor stature of President Bush's Democratic foes. Instead, the race has turned into one of the angriest, most volatile contests in the postwar era—a primal scream of resentment in which the Ins are Out, experience is equated with corruption, and voters are





Considered a shoo-in only a year ago, Bush has been wracked by voter resentment over his handling of the economy—and fractiousness in his own party over hot-button issues, especially abortion



**VOTERS WHO
THINK THE
NATION IS ON
THE WRONG
TRACK**

83%

THE WIRTHLIN GROUP

of the stampede to third-force politics, that periodic American longing for unsullied outsiders. But women candidates, billing themselves as the ultimate outsiders and capitalizing on the abortion issue, also stand to gain. California's message on that score rings loud and clear: Former San Francisco Mayor Dianne Feinstein and Representative Barbara Boxer of Marin County scored impressive victories in the June 2 Democratic primary races for two U.S. Senate seats.

'WASTED' VOTES? On the hustings, in supermarkets and suburban malls, voters aren't pondering the historical significance of their uprising. Some just see a vote for Perot as a chance to repudiate the established parties. "I hope Perot makes it," says Robert E. Chamberlin, 40, a Denver house painter. "I would like to see somebody besides a Democrat or a Republican." Adds fellow Denverite Lois J. Purfield, a hospital worker: "I've never wasted my vote before, but I would 'waste' it [on Perot] as a protest. We need more than the two parties."

This year's citizens' revolt is bigger than one candidate, though. "Perot is a vehicle to express unhappiness with government in general," says William T. Esrey, chairman of Sprint Corp. in Kansas City, Mo. "Whether he's the solution is something else." Peter Alltop, a retired Gillette Co. executive who showed up at a rally in Little Rock, agrees: "It's not really Perot. We've got to do something to take back this country."

Voter uprisings are not new. They have flared up before over polarizing issues such as race, Vietnam, and Watergate. The current outburst has been building for years. As far back as 1988,

a majority of voters were signaling unhappiness with the direction of the country and their political choices. Some polls found that two-thirds of the electorate was unhappy with either George Bush or Democrat Michael Dukakis. By 1990, the frustration had grown enough to scare prominent politicians ranging from conservative Representative Newt Gingrich (R-Ga.) to neo-liberal Senator Bill Bradley (D-N.J.). Both nearly

to abandon the Democratic and Republican Parties for an outsider who said: "Action. Now."

Joseph Brosek, a retired Cleveland attorney. He says he has had it with Bush over the economy and disses Clinton as "just another little Quayle. He [wiggled] out of the." Brosek likes Perot "because he's on aire and can spend \$100 million on his own campaign. Most of all," he says, "Perot's haircuts are practical. He has a haircut like me."

le the Texas billionaire's campaign be undone, perhaps by his contro-

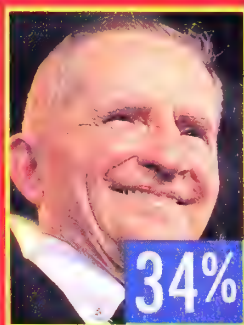
l business deal- (page 37), his pro- movement could e politics for to come. When a horn such as can seize the ential lead on the th of a buzz-cut, al experts quiver. "I't think of any like this," says Anderson, whose ndependent bid e Presidency won f the vote. "It's st the recession, e finger-pointing, nse that things broken down."

John Kushma, a political scientist at the University of Texas in Arlington, says one-third of the voters are radicalized. "As disaffected as people are, Spot the Wonder Dog could get 30%."

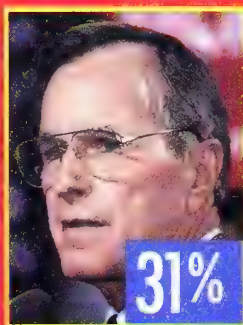
The result is "the biggest challenge to the two-party system since the Civil War," says Carleton College political scientist Steven Schier. Says Curtis Gans, director of the Committee for the Study of the American Electorate: "Party allegiances have been declining for 25 years. People want action, and Perot promises that."

For now, Perot is the main beneficiary

RESULTS IF THE PRESIDENTIAL ELECTION WERE HELD TODAY



PEROT



BUSH



CLINTON

ABC NEWS/WASHINGTON POST POLL

Top of the News

were defeated. But the breadth of the '92 rebellion is stunning. Says Bob Borosage, senior fellow at the Institute for Policy Studies: "This year, the bitterness and despair are much greater."

You don't need to look far to find reasons for all the angst. Since Bush took office, the economy has grown at an average annual rate of less than 1%. Real wages have been flat for nearly a decade. And while relatively shallow, the Bush recession traumatized the middle class by pushing down home values and triggering wave after wave of white-collar layoffs. "What economic growth we did have in the '80s was maldistributed," says Stuart E. Eizenstat, former domestic adviser to President Carter. "There

erupted, it just became the symbol of everything that had gone wrong."

Adding to the disgust with politicians was the spectacle of lawmakers running a perpetual campaign, forever raising funds from fat cats. "The biggest problem, and one Perot is starting to address, is that people feel the system is not fair," says David Sawyer, a New York media consultant. "Why should you have your taxes raised if millionaires get away scot-free, with all these special tax breaks?"

ODD TWIST. In normal times, a Daddy Warbucks figure such as Perot would be most at risk from a backlash. But in perhaps the weirdest twist of the campaign, many see Perot's cash hoard as a

things." Even on Clinton's home the anger is ricocheting. "People do like Bush," says Little Rock data professor Wayne Pigeon. "But they don't think Bill Clinton is different. He looks slick."

Perot has his own typically blunt take on all of this. "The White House, Congress are just gridlocked. Nothing goes on," he said in a recent *BUSINESS WEEK* interview. "They spend all day calling one another names—and that doesn't fix our problems."

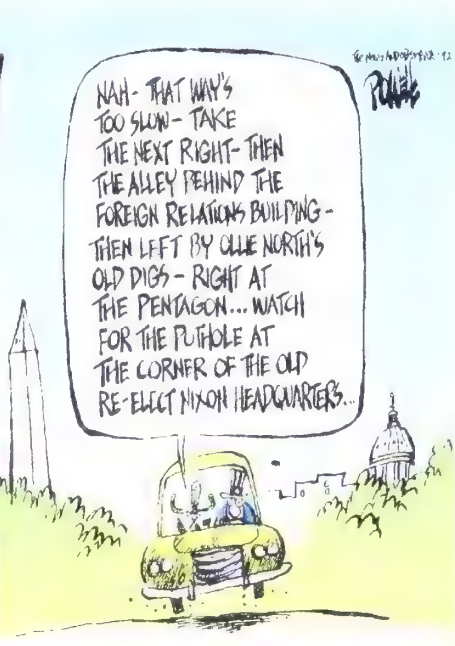
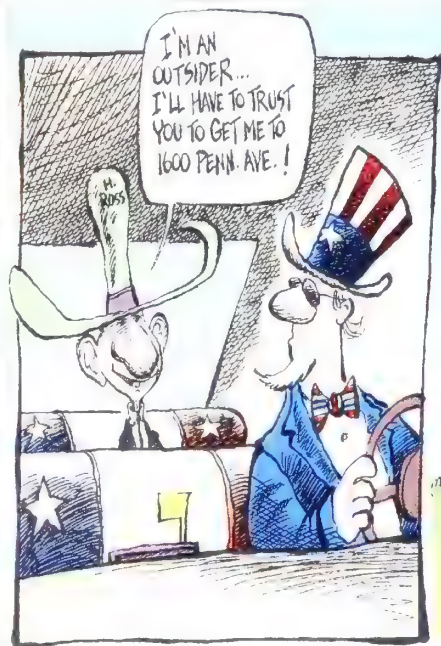
The wave of resentment Perot is igniting spells trouble for the established political order. If Perot goes all the way, still a long shot, in the minds of many polls—he and a big class of reform-minded congressional freshmen could take Washington upside down. That could usher in a restructuring of the tax system, campaign-finance reform, and tougher ethics requirements for government officials. Or it could produce worse class chaos. "A government of reformers is not necessarily a better government," observes Eizenstat.

SQUIRMING EXECUTIVES. To corporate chieftains, the prospect of a government of outsiders is particularly threatening. CEOs have long pined for one of their own as President. But with the gunpowder scent of populism in the air and memories of Perot's assault on General Motors Corp.'s bureaucracy still fresh, many now are squirming in their padded leather chairs. "Business leaders fear uncertainty, first and foremost," says a top Republican strategist. "They fear a new Congress that could be prone to sudden antibusiness enthusiasms. They fear Perot's Olympian ego. They know that although he's of business, he doesn't seem beholden to it. And he doesn't need them to raise money."

The upshot? The voter unrest has sent a powerful message. Says William Bennett, Education Secretary in the Reagan Administration: "We're not seeing the end of parties. This is a warning that they need to stand for something principled again. Republicans don't raise taxes, but then we raise taxes; we're against affirmative action; we're against big government but issue scores of new regulations. What are we?"

Ross Perot and other anti-Washington crusaders now running for office have an answer for that, too. Unless Democrats and Republicans mount the kind of reform they seem incapable of, what they are is history.

By Lee Waleczak, Doug Harbrecht, and Howard Gleckman in Washington with Richard Dunham in Little Rock and bureaus reports



was a growing gap between top and bottom and between wealthy and middle class. That makes people angry."

The current econo-pessimism goes beyond the two-year slump. This time, voters seem to fear an erosion of America's ability to compete with the rest of the world. "People feel their economic problems are no longer part of the business cycle," says political analyst Kevin Phillips. "They see them as part of a broader economic decline."

Dismay over the financial scandals of recent years has also played a part in fomenting the anti-Washington jihad. The hugely expensive bailout of savings and loans, the Bank of Credit & Commerce International's global scam, and highly publicized cases of Wall Street cheating have fueled enormous cynicism. "The S&L mess was a real bonfire, but it was so complex that people didn't know whom to blame," contends Eizenstat. "Then, when the House bank scandal

political asset. "This year, Perot is perfect," says conservative activist Paul Weyrich. "He's a billionaire who gets things done and can't be bought."

As career politicians in an antipolitical year, Bush and Clinton appear to be part of the problem rather than agents of change. Bush has tried to recast himself as a crusading reformer, out to confront congressional Democrats. Clinton, after a fling with traditional Democratic rhetoric, now attacks both parties as "brain dead" and calls himself a disciple of "Third Way" politics.

Voters aren't buying it. Says Bob Thompson, assistant manager of a Super Kmart in Medina, Ohio: "Bush lost his credibility when he said, 'No new taxes' and then the new taxes came out. He was great with the war, but back home he hasn't focused on

NUMBERS OF REPRESENTATIVES WHO WON'T BE RETURNING TO THE HOUSE

67

IN



IN SOUTH VIETNAM IN 1969: PEROT HAS LONG TRUMPETED THE POW-MIA CAUSE AND SAYS, "I'VE NEVER CONSIDERED INVESTING IN VIETNAM"

AS PEROT LOOKING FOR MORE THAN MISSING G.I.s IN VIETNAM?

Vietnamese officials say he's been trying to lay groundwork for business deals. Perot says: Nonsense

Nothing has helped catapult Ross Perot into the political limelight, it's been the POW-MIA issue. Perot earned his reputation as a POW champion during the Christmas season of 1989, when he flew to Indochina with loads of medicine and food for captured U.S. servicemen. Although the Vietnamese didn't let Perot into the country, the spectacular gesture eventually led to better treatment of POWs and Perot a cause he has trumpeted since.

Now, senior Vietnamese officials say Perot's relations with Hanoi extend beyond the POW or MIA cause. In an interview with BUSINESS WEEK, Le Bang, the director of the Americas department at Vietnam's Foreign Ministry in Hanoi, says that Harry McKillop, a Perot representative, has visited Vietnam 13 times in the last 17 years. And starting in 1990, he says he detected a shift in Perot's

interests. According to Bang, McKillop asked Hanoi to give Perot the O.K. to put together deals with U.S. companies on behalf of the Vietnamese government once the U.S. trade embargo was lifted. McKillop, Bang says, also visited the Heavy Industry Ministry and others during his trips.

'TOTAL MISFIRE.' Perot vehemently denies any business involvement in Vietnam. "This is a total misfire," he told BUSINESS WEEK. "I've never considered investing in Vietnam. My only interest was in MIAs." Perot says that the Vietnamese would bring up possible business deals, but he wasn't interested. Perot says McKillop made seven visits to Vietnam since 1987: "They kept asking him to come back," Perot says. "The one thing you have to be with Asians is patient." Perot insists that he never asked for any authorization to arrange business deals. He confirms that McKil-

lop did visit other ministries in Hanoi, but Perot says he did it "to accommodate the Vietnamese."

In 1990, when Bang says Perot's interests began to shift toward business, Secretary of State James A. Baker III was in Paris hammering out a Cambodia peace accord with Hanoi's cooperation. To many, it seemed as if the lifting of the U.S. embargo was imminent. The first U.S. businessman to rush in to Vietnam was McKillop, who was acting on Perot's behalf, Bang says. In the summer of 1990, according to Bang, McKillop said, "We are satisfied with the MIA issues and can put that behind us. The time is ripe for American companies and [Perot] himself to invest in Vietnam. We should be concentrating on business and economic relations." McKillop declined to be interviewed for this story. Perot responded on his behalf.

Bang claims McKillop told him he

Top of the News

needed a letter from Foreign Minister Nguyen Co Thach to prove that Perot had a mandate to represent Hanoi. Thach immediately sent the letter. "In anticipation of the normalization of relations, Vietnam now agrees to designate Mr. Perot or his representatives to work on behalf of Vietnam," says Bang, reciting it from memory.

The letter, Bang says, specified that Perot would be entitled to compensation from American companies and their Vietnamese partners for any deals that succeeded. It specified six areas of interest: electronics and computers, oil and gas, metals, real estate, food and agriculture, and transportation. McKillop said that Perot was personally interested in investing as soon as the embargo was lifted, Bang says.

Perot dismisses much of Bang's account. He says that Foreign Minister Thach did write him a letter asking for help in developing certain industries, "but it was certainly not at my request." Perot says he never responded to it, and both he and McKillop recall that when McKillop first handed Perot the letter, his response was: "What the hell is that?" Indeed, Perot says he then told McKillop not to return to Vietnam, but when Thach retired in 1991, McKillop went on a "ceremonial" visit.

The MIA issue remains one of the most divisive in American politics, with some conservatives arguing that the U.S. trade embargo should remain in place until all 2,266 MIAs are accounted for. Perot now says he needs more information before deciding what his position is on the embargo. Furthermore, he says he still believes that there are U.S. servicemen alive in Southeast Asia today.

CHANGE OF HEART. Perot and McKillop first met in 1969. It was McKillop, then a Braniff Inc. vice-president, who helped Perot charter the two Braniff planes for the Christmas airlift. McKillop accompanied Perot on that visit and one in 1970.

The Perot Group confirms that McKillop is now a full-time Perot employee in the real estate division, but other sources say he is Perot's man for undertaking "special assignments." From 1986 to January, 1992, McKillop worked for Perot's old company, Electronic Data Systems Corp., as head of its travel group. Company sources say McKillop did take a number of trips from Dallas to Southeast Asia while still working for

EDS. Most employees assumed he was going there to discuss MIA-POW issues, but McKillop's instructions, which came from Perot, were kept secret, an EDS source says.

While McKillop seems to have established close relations with Le Bang, Perot says, "I don't know who this guy Bang is." The Vietnamese official is widely regarded as pivotal in promoting an economic thaw between the two nations. Bang visited the U.S. in 1991 as a guest of the not-for-profit U.S.-Vietnam

ment of the Vietnamese by the U.S. A former Reagan Administration official who talked with Perot before the trip and was familiar with the negotiations says Perot believed the Vietnamese would offer more information on POW MIAs if the U.S. started pouring in development money. "He came back telling us all the things the Vietnamese wanted which we all knew before he went," the former official says. "He probably confused the Vietnamese. God knows what he said. He may have led them to believe that there was a lot more that the U.S. could offer." When the White House shrugged off the Perot visit, he blamed the Administration for dragging its feet on the MIA issue.

McKillop took most of his trips to Vietnam in 1988 and 1989. Almost every time, he had access to Foreign Minister Thach to discuss MIA issues or to smooth out the diplomatic tiffs that were slowing down progress. "He developed very good relations with Vietnam and with me," Bang says. On two occasions, he added, Hanoi helped McKillop visit Laos, a country that has revealed little about those missing in action.

'STRAY BULLET.' In 1989, Bang says he accompanied McKillop to schools and hospitals at old battle sites in Vietnam. At a college Bang says, McKillop was stunned to see that English-language textbooks came from Russia. Bang says McKillop promised to ship textbook medicine, and medical equipment. So far, Perot has not delivered on promises to give humanitarian aid, Bang says. "I know nothing about this," Perot says. "Mr. McKillop says it is not true. If we had made any commitments on humanitarian items we would have kept them."

Perot has remained active on the MIA-POW issue throughout the years. As late as last fall, he met with the Senate Select Committee on POW-MIA Affairs in Washington. Staffers followed up later in Texas.

Why would Vietnamese officials raise these issues now? Perot says Bang is either a "stray bullet" or, more ominously, he suggests that "our government has gone to them and said if you really want to speed up normalization, chew on this guy." So far, this bizarre episode raises more questions than it answers.

By Pete Engardio in Hanoi, Amy Borrer in Washington, Wendy Zellner in Dallas and Joyce Barnathan in New York

ROSS PEROT'S DEALINGS WITH VIETNAM

- 1969** Perot tries to airlift food and medicine to POWs
- 1970** Perot flies the wives of five U.S. POWs and MIAs to Vietnam, to try to persuade Hanoi to soften its stance
- 1973** Perot pays for a homecoming parade for Vietnam vets in San Francisco
- 1986** The Reagan Administration gives Perot special access to government documents on the POW-MIA issue
- 1987** The White House is angered by Perot's visit to Vietnam, charging that he undermined U.S. policy
- 1988** Perot point man Harry McKillop takes the first of a series of trips to Hanoi stretching over the next three years
- 1989** Hanoi officials say McKillop promised humanitarian aid. Perot denies it
- 1990** Secretary of State James Baker begins to hammer out a Cambodian peace accord with Hanoi's backing
- 1990** Vietnamese officials say McKillop begins to push for wide-ranging business deals, but Perot says he was only interested in MIAs
- 1990** Foreign Minister Nguyen Co Thach writes a letter authorizing Perot to put together deals with U.S. companies for the Vietnamese government. Perot says he didn't solicit the letter and didn't respond

DATA BW

Trade Council. "Perot's people obviously knew [Bang], and when they heard he was coming they were all over me for access to him," says Virginia Foote, the group's staff director. Among them was McKillop, whom Foote describes as "a very mysterious man. He's the sort of character who doesn't even give you his business card."

Perot's last visit to Vietnam was in 1987. It was after that trip that the Texas billionaire appeared to have a change of heart. Perot suddenly started talking publicly about Vietnam's own 100,000 MIAs and the "rude and arrogant" treat-



One big loser in the Danish vote is EC President Jacques Delors, who is often mentioned as a leading candidate to succeed French President François Mitterrand

48,000 VOTES THAT SHOOK A CONTINENT

Denmark's thumbs-down on Maastricht may create a two-track Europe

as the mouse that roared. When Denmark rejected the European Community plan for political and economic union on June 2, the impact was immediately across Europe's political and economic landscape.

A narrow rejection—the measure by 48,000 votes—jeopardizes the track by the EC at last December's Maastricht summit. The result may well split Europe. The single trade treaty scheduled to take effect at the start of 1992 will go ahead, but the more ambitious goals of a single currency by the end of 1999 and a common foreign and defense policy could be put off until the next century.

A delay would be a crushing blow to fervent Euroboosters, particularly in France and Germany. But it would be a victory for the British, who have watched the growing power of the European bureaucracy with deep concern, and the U.S., which has been worried that its war position in Europe was being undermined by the EC's efforts to take greater control of security and foreign policy.

IMPOSSIBLE. Though polls had shown that Danish voters were deeply divided, few in Brussels even considered the possibility that they would reject the treaty. Now, the EC's broader political and economic agenda is adrift. At a summit scheduled for the end of the year, leaders had hoped to agree on the final blocks of a broader Europe. The agenda were plans for a new EC treaty and discussions about expanding

the community to include Sweden, Switzerland, Austria, and, eventually, Eastern Europe. But Denmark's rejection of the treaty "makes enlargement almost impossible, because it was being negotiated on the basis of Maastricht," says Peter Luff, director of the European Movement, a pro-EC integration group.

One big loser of the Danish vote is European Commission President Jacques Delors, who is often mentioned as a leading candidate to succeed French President François Mitterrand. Under Delors' direction, EC leaders cut the Maastricht pact and other deals with little grass-roots consultation. Now, it seems the Danes and other Europeans are worried about having more of their taxes go to fund poorer EC nations such as Portugal and Greece and, potentially, those of Eastern Europe. They are also concerned about losing political clout in a Europe dominated by giants such as Germany and France. That the Danes' economy is among Europe's strongest only deepens concern about the depth of grass-roots resistance to Maastricht among other members. "There has been no serious debate in Europe about these momentous changes," says Angelika Volle, a senior research fellow at the German Foreign Policy Society in Bonn.

The Danes' rejection of monetary union rocked the financial markets. Traders dumped stocks and bonds in Paris, London, and Frankfurt amid worries that without the pressure of monetary union, which would require the indi-

vidual countries to meet tough fiscal targets, inflation and budget deficits would rise. In Paris, the bond market was forced to suspend trading in European Currency Unit futures after they dropped the maximum permissible one-day price swing.

One thing the Danish fallout isn't likely to stop is the arrival of a single market on Jan. 1. With the vast majority of EC directives in place, European and foreign companies will likely continue efforts to shape up for the borderless marketplace. After a brief hiatus caused by economic slowdown, European corporations are once again witnessing a surge of mergers and consolidations as business adjusts to the new climate.

SECOND THOUGHTS. But Delors & Co. are scrambling to keep political and monetary unification on track as well. They hope to persuade other EC governments to sign off on Maastricht in order to put pressure on the Danes to reconsider. But the Danes' thumbs-down has served as a warning to other politicians. Originally, only Ireland planned to put the deal to a popular vote, on June 18. Now, Mitterrand, who had intended to ram the treaty through the French legislature, has announced that France will follow suit. Other EC leaders may have little choice but to do the same. There are also big obstacles to some of the other options now under discussion, including rejiggering Maastricht and proceeding without Denmark.

Delors has little time to restore momentum to Maastricht. Britain takes over the EC presidency on July 1. And Downing Street sources say that having been handed a windfall that threatens to derail the treaty, the British are most unlikely to use the presidency to put Maastricht back on track.

By Bill Javetski, William Glasgall, and Richard A. Melcher in London, and Patrick Oster in Brussels

A LETHAL WEAPON FOR SHAREHOLDERS?

Proposed SEC rule changes could empower them as never before

In recent years, activist institutional investors have been trying to shake up many of America's corporations, peppering them every proxy season with resolutions on social and corporate-governance issues alike. Yet for all the putative clout of the nation's pension and mutual funds—which hold 53% of all U.S. stocks—only rarely have institutions been able to prompt change at the companies in which they invest. Shareholders say the problem lies with government restrictions that tie activists' hands and give management a decided edge in any dispute.

That may be changing. After a two-year review, the Securities & Exchange Commission is expected soon to reintroduce a controversial slate of proxy reforms that could empower these investing behemoths, making it easier for them to challenge the way executives run companies. If the measures are approved, vows one shareholder activist, "heads will begin to roll" in corporate suites. No wonder the plan has kicked up a storm of corporate protest. And it has prompted a bigger outpouring of protest letters than any other issue in the SEC's recent history. "The Business Roundtable made it seem that proxy rules are right up there with the Ten Commandments, and any small modification is a threat to the world as we know it," says former SEC Commissioner Joseph A. Grundfest.

LEGAL WRANGLE. Even so, SEC Chairman Richard C. Breeden has decided to go ahead with what he labels "a fine-tune of the proxy process." The agency's proposal merely frees large shareholders to talk to one another without running afoul of cumbersome SEC rules. And it would remove other regulatory impediments, such as limited access to lists of shareholders (table). In a related move, the SEC is expected to propose a plan to force companies to provide more disclosure about executive pay.

Before the SEC gets much further down the reform road, however, there's

likely to be a detour into the courthouse. The Business Roundtable is widely expected to sue to halt the changes. It contends, for instance, that the SEC lacks the authority to tell companies how and when they should turn over shareholder lists. It won a similar legal battle in 1990 after the SEC outlawed new classes of stock with unequal voting rights.

This time, lawyers for Corporate America would likely argue that allowing investors to communicate more free-

ly would permit them to meet secretly, plot, for instance, a takeover. And executives insist the current system already allows shareholders to protest policies they don't like. Over the years, their resolutions have won increasing support and even a few victories. This spring, for example, 64% of shareholders approved a measure at Hartmarx Corp. asking management to rescind its poison pill.

People on both sides of the issue agree that the SEC's changes could make many more fund managers more assertive. "Institutions that have been passive—if not silent—will have fewer inhibitions," says Washington consultant James E. Heard, president of Institutional Shareholder Services. And the activists would get more active. Says Richard H. Koppes, general counsel of the California Public Employees' Retirement

System: "We'll focus on companies in an organized way—if they deliver the product to us, we have to do something with it." Potential targets of the activists include such poor performers as Sears Roebuck, Champion International, and Westinghouse.

HOT BUTTON. But if corporations decide to do it out with the SEC's proxy reform, they may not fight changes on this year's hot-button issue: executive pay. Last February, the commission decided for the first time to let shareholders of

nonbinding resolutions on compensation policies. Now it's expected to require greater disclosure of compensation, particularly about stock options. The SEC may seek to force companies to place value on options and disclose the figure in the proxy materials.

Although companies complain that it is too difficult to put a value on stock options, they may go along to avoid looking greedy and to head off more drastic measures being considered on Capitol Hill. So the coming months could bring an overhaul of corporate pay policies.

The SEC has more work to do, too. The current package represents merely the first in a series of proxy reforms. Activists are pushing for further changes from requiring confidential voting to making it easier for investors to nominate directors. Then, investors may finally have the power to act less like spectators and more like owners.

By Dean Foust in Washington, and Judith H. Dobrynski in New York



THE SEC'S PLANS TO SHAKE UP PROXY RULES

- ▶ Ease a restriction that bars an investor from contacting more than 10 other shareholders without first filing with the SEC
- ▶ Allow management and shareholders to circulate proxy campaign material without SEC clearance
- ▶ Ease access to companies' shareholder lists
- ▶ Make proxy statements available to the public as soon as they're filed with the SEC
- ▶ Require greater disclosure of total executive pay, particularly the value of stock options

DATA: SECURITIES & EXCHANGE COMMISSION

THE NETWORKS AND AFFILIATES MAY BE FALLING OUT OF LOVE

is instituting fees, and NBC and ABC want their own cable systems

talk about mixed feelings. On May 29, almost 200 CBS affiliates gathered at the posh Waldorf-Astoria in New York to hear about the network's ratings resurgence. Stationers cheered as CBS trotted out broadcaster Pat O'Brien from its successful Winter Olympics telecast and Rather from its rejuvenated CBS

Evening News. The point came when brilliant CBS Chair-Laurence A. Tisch told the affiliates: "We love you."

ough love. The next CBS Inc. announced would begin charging affiliates a fee for the programming and marketing services it used to provide gratis. The move has the effect of giving the \$121 million compensation CBS pays its affiliates to air everything from 60 Minutes to Murphy

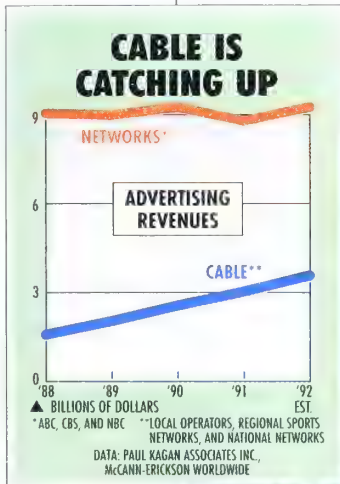
Brown. The network says eroding profit competition from cable forced change. But station owners are bit resentful and unsympathetic: "I hope they see how much this hurts the affiliates," says Wright, general manager of Seattle affiliate KIRO.

Maybe Wright should count his blessings. Over at NBC Inc. and Capital Cities/ABC Inc., affiliates are up in arms about the possibility that their networks soon be allowed to buy cable systems. On June 18, the Federal Communications Commission is expected to relax that bar the nets from becoming local operators (page 49). CBS doesn't want to enter the business. But ABC and NBC regard cable, with its growing advertising revenue, as a way to offset the casting's torpor (chart). "You're going to see a wave of behavior where the networks are taking care of themselves," says Jim Waterbury, general manager of KWWL-TV in Waterloo, Iowa, a resident of NBC's affiliate board.

HER WORLD. There's ample reason for self-interest. Collectively, the big three actually lost money on their core networks for the first time ever in 1991. The financial realities are fraying the cozy relationship the nets had with their affiliates. Says Anthony C. Malara, pres-

ident of CBS Affiliate Relations: "The world has changed so dramatically that we need to examine everything we do."

For one thing, the networks may no longer rely on affiliates as the sole conduit to deliver their programs to viewers. Some stations fear the FCC ruling would allow the nets to assemble a nationwide web of cable systems, effectively bypassing the affiliates. With 40% of U.S. homes still not wired for cable, that seems unlikely. But even with a few



DESNOES: "THERE IS A SUBSTANTIAL POTENTIAL FOR ABUSE" IF THE NETWORKS ENTER CABLE

systems, affiliates say, the nets could use their increased clout to bully them on issues such as compensation. "There is a substantial potential for abuse of power," says Peter Desnoes, who owns both NBC and ABC stations and chairs the ABC Television Affiliate Assn.

Neither NBC nor ABC has been specific about how it might expand into local cable. But both have acquired national cable networks such as CNBC and ESPN. And they want the change enough to lobby the FCC and risk the ire of affiliates: "It's unlikely that the networks would spend this much political capital to play just a small role," says Steven Rattner, a general partner at Lazard Frères & Co. who specializes in media.

Desnoes and other affiliates recognize that the FCC is likely to loosen restrictions, so they're pushing for assorted safeguards. Among them: The affiliates want each network to be allowed to buy

no more than 5% of the national cable subscriber base and no more than 25% of any local market. Desnoes points out that 5% of the U.S. market would already make NBC or ABC the third-largest cable operator after Tele-Communications Inc. and Time Warner Inc.

NO WAY OUT. For their part, the networks argue that restrictions are an unfair burden in today's multimedia environment. "These are historic anachronisms that should be done away with," says Richard Cotton, general counsel for NBC. Still, the nets would accept a cap of 10% of the national market and 50% of any local market. NBC is negotiating with its affiliates on a further compromise that it could present to the FCC. But talks between ABC and its affiliates broke down in February. Cap Cities General Counsel David Westin says the restrictions demanded by the affiliates would squelch ABC's ability to do a cable deal on the scale it envisions.

The FCC seems likely to adopt at least some safeguards. But with average operating margins topping 30%, most affiliates still roll up handsome profits, despite the advertising downturn and lower network compensation. So, complaints about financial mistreatment won't get much sympathy from the FCC. What's more, Chairman Alfred C. Sikes is pushing his colleagues to give the networks enough latitude to become robust competitors in cable.

There's not much the affiliates can do about it. They can't replace the 22 hours a week of prime-time programming supplied by a network. And since it's hard to jump from one network to another, affiliates really are bound to them for better or worse. Now, with the networks struggling to survive, they're finding out how bad worse can be.

By Mark Landler in New York, with Mark Lewyn in Washington

THE SOUND AND THE FURY AT SONY AND PHILIPS

One is rolling out a recordable disk. The other has a newfangled cassette

to turn its Betamax format for videocassette recorders into a standard. The company was bested by Matsushita, JVC, and scores of others, who were hawking VHS. Not only did Sony suffer an embarrassing defeat with the Betamax, but its late switch to VHS cost it the chance to be a major player in the market.

Now, Sony is facing another format battle, this time over the successor to the audio cassette. This fall, the Japanese consumer electronics giant will introduce its Mini Disc, a floppy-disk that delivers near-CD sound quality and allows listeners to record music—a huge advantage over current CD players. The new technology is no small gamble: Sony has poured about \$100 million into Mini Disc development and marketing.

TECHNO TUSSELE. Sony's rival is an equally determined Philips Electronics, which is pushing an alternative called Digital Compact Cassette. The Dutch consumer electronics behemoth, which spent some \$55 million on its technology, plans to roll out DCC in September—shortly before Sony introduces the Mini Disc. DCC, co-developed with Matsushita Electric Industrial Co., features crisp digital sound and recording capability but comes in the familiar cassette casing. Its big advantage: consumers will be able to play the analog cassettes they already own on a DCC deck.

As with VCRs, technological prowess won't determine the winner. Says Robert Heiblm, president of Denon America Inc., which will make players for each: "This war will be won over marketing." Adds Gary Thorne, president of Minneapolis-based retail chain Audio King Inc.: "Whichever brings more brands and more product variations to market, the better the chances of success."

DCC, announced more than six months before the Mini Disc, has taken the early lead, with more support from audio equipment makers. Even more critical is support from record labels. Polygram Inc., which is 80% owned by Philips, and

five other major music companies have pledged to launch 500 titles for DCC this year. Besides Sony Music Entertainment, the Mini Disc has gotten wholehearted backing from just one other music company, Thorn EMI PLC. Warner Music Group—a 50% partner with Sony in the mail-order music distributor Co-

THE BATTLE FOR YOUR EAR

SONY MINI DISC

Features: Near-CD sound, ability to shuffle among tunes, portable, erasable, and recordable

Price: \$650-\$800*

Backers: Sony, Denon, and Aiwa will make the players. EMI and Sony's Columbia and Epic will issue music

PHILIPS DIGITAL COMPACT CASSETTE

Features: Can play existing cassettes, near-CD sound, erasable and recordable

Price: \$799

Backers: Matsushita, Denon, and Sanyo will make the players. Bertelsmann, Philips' Polygram, and Sony's Columbia will issue music

*Estimate

DATA INC. COMPANY REPORTS



musical House—says only that it "anticipates" backing the Mini Disc.

Both Sony and Philips could use a big hit. After losing \$2.36 billion in 1990, Philips posted a profit of \$668 million on \$31.7 billion in sales last year—largely by slashing 32,800 jobs. With its consumer electronics sales 48% of the total, down 2% in 1991, Philips needs new products to drive growth. Sony, too, had a tough fiscal year ended Mar. 31, with pretax operating income plunging 44%, to \$1.3 billion, on a paltry sales increase of 5.7%, to \$30 billion.

At stake is a gigantic market. In 1990, U.S. cassette-player sales hit roughly \$1 billion, while prerecorded and blank tapes claimed \$3.2 billion. Philips, who invented the analog cassette in 1963, used to collect royalties on every tape sold. But the company, which co-developed CD players with Sony, hasn't fared well with those products. It is a top supplier of CD players in Europe, but Magnavox and Marantz brands have just 7% of the U.S. in-home CD market vs. Sony's 30%, says market research Verity Group. And Philips sells just 1% of all portable CD units in the U.S., measured against Sony's 60%. With DCC, Philips is determined to turn its innovation into big sales. "We were slow to introduce updated CD products. We learned a lesson out of that," says Frans Schmetz, Philips' U.S. marketing vice-president.

DOUBLE PLAYER. Sony hopes to maintain its audio dominance by persuading cassette owners to trade up to its Mini Discs rather than to DCC. Success is crucial to Sony's effort. In addition to its leading share in the CD market, Sony controls 50% of the portable cassette player market in the U.S., as well as 15% of home cassette decks and 17% of car cassette units, according to the Verity Group. At an average price of \$150, the 15 million Sony Walkmans sold last year added up to \$750 million, says Eugene G. Glazer, analyst at Dean Witter Reynolds Inc.

The rest of the consumer electronics industry doesn't much care who the format wins—so long as one of them does soon. Since the heralded digital audio tape player bombed, the industry has been eagerly seeking a new item with mass appeal. No wonder: Americans have snapped up \$1 billion CDs in nine years, but the sales haven't been enough to offset the sales drop in prerecorded cassettes, which peaked in 1989. Since then, unit sales of the tapes have sunk 20%, to 360.1 million, according to the Recording Industry Association of America.

For the time being, retailers plan to carry both DCC and Mini Disc and let consumers pick the winner. But if Mini Disc wins, Sony will have to look for Sony to hang on beyond that hope. It has already hedged its bets by licensing Philips' DCC technology and promising to sell digital cassettes to DCC. Whatever the Mini Disc's fate, Sony is making sure it won't be shut out of this format war.

By Lois Therrien in Chicago, with Mark Gross in Tokyo and Patrick Oster



PFIEFFER: "WE'VE BEEN EXCLUDING OURSELVES FROM THE SWEET SPOT OF THE MARKET"

COMPAQ DECLARES WAR ON THE CLONES

It introduces two dozen low-priced PCs—aimed right at Dell and AST

Six months ago, Compaq Computer Corp. looked as if it would become just another computer industry casualty, a highflier that had crashed and burned. After laying off 1,700 employees and ceremoniously ousting co-founder David Canion, the company reported a loss of \$324 million and slashed its price to shore up sales. Since then, CEO Benjamin M. Rosen, who replaced Canion in October, has been working to stem the bleeding.

Now, Pfeiffer is getting ready to launch what he's calling "an all-new Compaq." Unlike the old one, he says, Compaq isn't going to let the likes of clone-makers AST Research and Dell Computer Corp. get the best of it. On June 15, Compaq is set to introduce two dozen desktop and laptop PCs. Analysts had expected Compaq to price its desktops at \$1,000—slightly below Dell and AST. But Pfeiffer says Compaq will meet them head on: "We will be the low-cost leader."

SAVINGS. That's a real risk for a company used to charging premium prices and relatively high cost of ownership. Even after re-

cent cutbacks, such as slashing manufacturing costs 17%, operating costs at Compaq are 26% of sales, vs. 19% at Dell and 21.2% at AST. Pfeiffer says he aims to save an additional \$150 million a year in manufacturing, partly by building the new products at the company's Singapore factory. In the past, all products sold in the U.S. were built in Texas.

But will the low prices pump up the volume? Compaq's role model may be Apple Computer Inc., which successfully switched from a premium-price strategy to a low-price, high-volume one in 1990. If Compaq can also boost shipments as it cuts costs, it can restore earnings, says analyst Jim Poyner of Rauscher Pierce Refsnes Inc. in Dallas.

On the other hand, Compaq's new products could simply trigger more price-cutting in a market where profits are already tight. "This announcement may start a bloodbath, and Compaq could be the victim," says analyst Kevin McCarthy of Mabon Securities Inc. But the products should boost shipments dramatically, he predicts. "If they are going to go down, they will go down in flames."

Competitors are al-

ready poised to cripple Compaq's comeback. AST says it will roll out new products later this summer, while Dell is set to announce entry-level PCs in June. "Compaq won't out-Dell Dell," vows Joel J. Kocher, a Dell senior vice-president.

Compaq's new lineup, based on Intel Corp.'s 386 and 486 chips, includes the company's first notebooks and desktops aimed at the fastest-growing segments of the PC market—consumers and small-business customers—rather than its traditional business accounts. To reach these customers, Compaq for the first time will sell its wares through popular computer superstores and mass merchandisers such as Circuit City Stores Inc. The company also plans to package some of its new computers with preloaded software and peripherals, which will make them easier for novices to purchase and to use.

Compaq's plans could help erase bitter memories of last year, when customers shunned its high-priced products in favor of low-cost clones sold by mail and by computer superstores. The company's sales fell 9%, to \$3.3 billion, the first decline in its 10-year history. Things didn't improve in the first quarter: Profits plunged 60%, to \$45 million, on a 19% sales decline. And two weeks before the announcement, the stock was trading at 27, compared with a range in the 60s a year earlier. "Our recovery has taken much longer than any of us anticipated," admits Compaq Chairman Benjamin M. Rosen.

MORE BOMBHELLS? Still, for all the focus on its entry-level line, Compaq isn't surrendering its turf in the high end. On June 8, it plans to introduce a new line of desktop PCs and color notebooks for the corporate market, along with enhancements for its high-powered but slow-moving Systempro, a minicomputer-like "server" that ties PCs into networks. In the third quarter, Pfeiffer says the company will replace all models not affected by the June introductions. "Our problem before was that we did not recognize that the market had changed and shifted," says Pfeiffer. "By just competing in the high-performance end, we've been excluding ourselves from the sweet spot of the market. We had to switch to a much broader range."

Analyst Rick J. Martin of Chicago Corp. figures the June 15 products could account for half of Compaq's revenues by 1994. Indeed, new products introduced by yearend, including Compaq's first printers, due this summer, will make up 90% of the company's product line. Then, Pfeiffer will be able to see whether his "new Compaq" is as high-flying as the old one.

By Stephanie Anderson Forest in Dallas, with Catherine Arnst in New York and bureau reports



THE SUPERLOSERS IN THE SUPERSAVER WAR

A lot of airfares has left travel agents and airlines bleeding

The first week of June marked a happy time for travel agents and airlines alike. The summer travel season was officially under way, and the weather was perfect. But for the superlosers in the supersaver war, it was a different story.

the spree means just one thing: the summer travel season is under way.

of agents. It wiped out chances for a profitable summer. For the weaker ones, the

Miss of death. And for American Airlines Inc. Chairman Robert L. Crandall, whose air-

it sealed his reputation as the

TIDAL WAVE.

ness that's never full, the out-
break of fare madness was
especially dramatic. The ab-

Assistant American first
cabin, sliding all a brace fares

tidal wave of demand. But

Fares were so low that many
agents found that it cost more

commissions, even worse, the agents
had to reissue earlier tickets at the new

To the rescue, Delta. Usually
the last to make an independent move,
that agents would not have to repay
commissions after all. American and
United were forced to follow the lead.

seven it helps," says Philip G. Davidoff,

Travel Agents. But "we'll still take a hit
and" he adds. Travel agents worry that

to be in the "red," says Davidoff. "I'm
glad to see the airlines taking a hit, but
I'm not sure it's the best way to do it."

American agents agree. "The airlines
are taking a hit, but it's not a good thing
for the industry," says Davidoff. "I'm not
sure it's the best way to do it."



DURAN: VOLUME FOR THE REST OF THE SUMMER MAY BE ANEMIC

fare cuts will cost the airlines \$500 mil-
lion in 1992—over and above a loss of up
to \$1 billion in 1991, says Davidoff.

reals, the effort
wind up "revenue-neu-
tral." No airline will es-
tablish a goal to make travel
agents whole on the

well beyond financial
industry observers say
American's move may
be one more attempt to

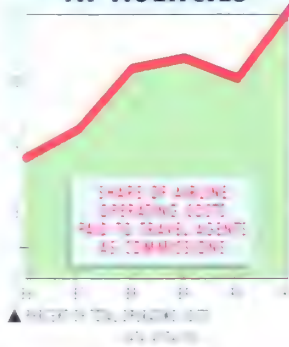
lines, Trans World Airlines and In-
ternational Airlines, are under heavy
pressure from the most recent flight
out Northwest Airlines Inc. and its
other airlines, stating that could
endanger its position. "I'm not sure
I'm the best person to put other
lines and certain travel agents off
business," says Davidoff. "I'm not
sure I'm the best person to put other
lines and certain travel agents off
business."

BOYCOTT? The fare wars could also
lead to a boycott of airlines. As U.S. airlines
cut back on European and Asian
flights, some European and Asian
airlines are considering a boycott of
U.S. airlines.

test the U.S. bloodbath, repud-
ated the airlines. "I'm not sure
I'm the best person to put other
lines and certain travel agents off
business," says Davidoff. "I'm not
sure I'm the best person to put other
lines and certain travel agents off
business."

Davidoff is peeved at the
industry needs a simple fa-
re for any route. Northwest's prom-
ise to match the lowest fare on any
route is a good idea, but it had a
chance to catch on. American
going to stand by and
that happen. The
swinging shot at Nor-

COMMISSIONS SOAR AT AGENCIES



marketing. That
the airlines and
most airlines and tra-
vel agents are looking
long-term trouble.

TODAY IS THE FIRST DAY OF THE REST OF YOUR LEASE.

1992 Acura Legend



You've heard them all. *Carpe diem. Live life to the fullest. Make the most of every moment.* But you can't possibly grasp the full meaning of such expressions until you find yourself behind the wheel of a 24-valve, 200-horsepower Legend Sedan or Legend Coupe.

Which is why we recommend a visit to your Acura dealer. There, you'll have the pleasure of hearing about some extremely low monthly lease rates with some very flexible terms. Thanks to a leasing program that has been developed by the American Honda Finance Corporation, you could be parking a brand new Legend in your driveway in just a few hours. Of course, as you might have guessed, this opportunity, like time itself, is fleeting.

So, don't just sit there. Do something. Not tomorrow. Not the day after tomorrow. Not a week from now. See your Acura dealer or call 1-800-TO-ACURA for the name of your nearest Acura dealer.

And don't just seize the day.
Seize the lease.



ACURA
PRECISION CRAFTED PERFORMANCE

Starting today,
everything your
computer has ever done,
it will do better.

You've created documents, crunched numbers, even conquered alien invaders. Still, your software hasn't really been able to make the most of your hardware. But now it can.

Introducing OS/2® 2.0. It's a new way to do more with your computer programs than you ever could with DOS or DOS with Windows.™ Now you can run more than one program at a time. Print a document and calculate a spreadsheet while you create a new letter. You can even "cut and paste" between *any* programs—the possibilities are endless.

OS/2 2.0 lets you do it all so easily. Friendly icons fill the screen. Even installation is graphically guided. It also comes with **HelpWare**™ a full range of services and support, including a toll-free number. But maybe the best part is that for less than the cost of DOS and Windows, you get the capabilities of both. Plus all the added benefits of OS/2 2.0—including Adobe Type Manager.™

With OS/2, you can do the only thing you haven't been able to do with your computer. Make the most of it. For an IBM authorized dealer near you, or to order OS/2 2.0 from IBM—at special introductory prices of \$49 for Windows users and \$99 from any DOS—call 1 800 3-IBM-OS2*.



Introducing OS/2 2.0.

- Runs DOS, Windows and OS/2 programs.
- Runs more than one program at a time.
- Supported on most 386 SX PCs and above.
- Upgrade from Windows to OS/2 2.0 for \$49; \$99 from any DOS.**

OS/2



* IBM and OS/2 are trademarks of International Business Machines Corporation. ** Upgrade from Windows: \$49; upgrade from any DOS: \$99. U.S.A. only. These prices valid only when ordered directly through IBM. Proof of purchase required. Delivery and installation charges. Offer valid in U.S.A. only expires 7/31/92. HelpWare limited to U.S.A. only. IBM and OS/2 are registered trademarks and HelpWare is a trademark of International Business Machines Corporation. All other trademarks are trademarks and registered trademarks of their respective companies.

ED BY DEIDRE A. DEPKE

WHAT HAPPENS OFTEN

Business Week / Harris Poll

100 female executives at corporations with \$100 million or more in sales found that while they had been harassed, few reported it

Have you ever been the victim of sexual harassment that you consider to be serious?

27% No 73%

If yes, did you report this to your employer?

25% No 75%

If yes, why not?

	Percent
I handled it myself.....	21
It could hurt career.....	17
It could do no good.....	17
My harasser was employer....	16
Long time ago/Not an issue.....	10
I'm too young.....	9
I feared repercussions.....	9
It couldn't be believed.....	9
Others.....	18
I'm sure.....	5

DATA: BW/HARRIS POLL

Salomon's New Look Seem Familiar

Salomon's transformation of Salomon Inc.—or at least its executive offices—is complete. The new hierarchy bears the distinct stamp of outgoing Warren Buffett. As expected, Buffett on June 3 stepped down as chairman of Salomon Inc., parent company of investment bank Salomon Smith Barney. The company's board voted to replace him with Buffett's handpicked successor, Robert Denham. Denham has been Salomon's general counsel and is a longtime Buffett associate. Denham wasn't one of the names rumored to be up for the job. That list included luminaries as far as Fund for America CEO John Byrne and former Federal Reserve Chairman Paul Volcker. But Denham's selection is no surprise. As a partner in the Los Angeles law firm of Tolles & Olson, he is the top legal gun for Buffett's Berkshire Hathaway,

engineering Berkshire's takeover of Scott Fetzer. He also arranged Berkshire's investments—including its Salomon stake. With the firm facing a host of lawsuits stemming from its admitted violations of government-bond trading rules, the company will need lots of legal brainpower.

Buffett will still have plenty of say in the company: Berkshire holds a \$700 million investment in the troubled brokerage, and Buffett remains chairman of the board's powerful executive committee. What's more, another Buffett man, Deryck Maughan, heads the investment bank.

PULLING THE PICKETS AT OHIO CRANKSHAFT

Local auto workers are calling it the longest U.S. strike ever settled. Almost nine years after more than 100 workers walked out of Ohio Crankshaft, a unit of Cleveland-based Park-Ohio Industries, management and labor have finally reached agreement on a contract.

Park-Ohio agreed to retain hospitalization benefits for retirees—the key issue in the strike—after new management decided to end the dispute. "It was the right thing to do," says Chairman Thomas McGinty. The union also will settle an unfair labor practice claim and other issues.

SWEATY SCENES FROM A MALL

You've heard of people who shop 'till they drop? Madelyn Miller, president of a Dallas advertising agency, shops to drop pounds. Now, she's trying to sell the idea with a new how-to: the *ShopAerobics Pocket Guide*, a blueprint for combining bargain-hunting with exercise.

Miller, tongue-in-checkbook, provides lots of instructions in her \$6 guide for simultaneously working out muscle groups and wallets. The First Pick Maneuver, for instance, is a breaststroke-like motion useful for getting through clothes racks while exercising the chest and upper back. There's also the Hesitation Move, a sort of side-bend that's good for the waist and can be done in front of the mirror while trying to make a tough buying decision. Other *ShopAerobics* tips: Wear loose-fitting clothes, for easy stretching and quick changing, and carry a big bag, so you can build up arm muscles and carry around tons of new stuff.



sues. "I went home and couldn't sleep a wink because I couldn't believe it," says Ed Andexler, an Ohio Crankshaft striker and vice-president of United Auto Workers Local 91. He worked as a bank courier during the strike.

GM PUTS ITS PARTS SUPPLIERS ON NOTICE

As part of a massive streamlining effort, General Motors will centralize purchasing operations and push suppliers to reduce their costs. GM's new purchasing chief, J. Ignacio Lopez de Arriortua, recently told 500 suppliers that the carmaker will work with them to boost productivity.

pliers that the carmaker will work with them to boost productivity.

He also sparked a bidding war over components for future GM models. For the first time, outside suppliers will be able to bid on parts made by GM subsidiaries. That will further strain relations with the United Auto Workers, which represents some 80,000 parts employees, whose jobs now may be jeopardized.

AURA LOSES SOME OF ITS GLOW

The problem with highfliers is that sooner or later, most of them fall to earth. Take Aura Systems, which claims to have a proprietary magnetic technology that could be used for everything from door locks to shock absorbers. Those claims were enough to send its stock soaring.

But Aura's auditors, Deloitte & Touche, are skeptical. The firm is demanding accounting changes that will force Aura to post an annual loss just months after saying it would be profitable. As a result, Aura missed the SEC's May 29 filing deadline for its annual results and spooked investors. The stock has dropped 50% in five months.





The most successful banks today
are converting to another gold standard.



An entirely new standard of faster
services is now possible with Northern Telecom
phone-to-computer links.



Technology the world calls on.

THE FCC'S HIGH-VOLTAGE AGENDA COULD MAKE LOTS OF SPARKS

Washington rarely adopts controversial ideas in an election year. But the Federal Communications Commission is bucking conventional wisdom. Chair-Alfred C. Sikes is pushing an ambitious agenda to over-telecommunications regulation for the 1990s.

Sikes gets his way, the agency will let networks buy cable systems and will adopt rules that would pave the way for a new market for so-called personal-communications networks (PCNs). The FCC would also open up radio-spectrum for new technologies and set a U.S. standard for high-definition television (HDTV)—a key step toward commercialization. "Some of our most important work will culminate in the next six months," predicts Sikes.

Not without a fight, though. All of Sikes' initiatives have generated opposition. Indeed, he may end up encountering more static than he thought he'd find. "There is going to be a lot of dust kicked up," predicts Gene Kimmelman, executive director for Consumer Federation of America.

WARS. One of the first battles is scheduled to be waged on June 18. That's when the FCC is expected to let broadcast networks buy cable systems (page 41). Sikes favors such a plan to aid the financiallyailing networks. But powerful local affiliates are convinced that the networks' corporate parents would favor their own holdings over the networks. The agency is likely to take a middle course, giving affiliates such protections as a limit on the networks' ownership of cable systems in affiliate markets. Finding an acceptable compromise will be far harder when it comes to PCNs, a wireless phone service. Sikes, who has promoted the new service as an alternative to cellular phones for some time, is adamant about auctioning off licenses rather than doling them out by ping-pong-ball-and-hot-air lotteries. He claims that lotteries for cellular-phone service allowed

speculators to turn enormous profits by reselling their licenses.

But Congress would have to approve an auction, which would favor deep-pocketed corporations over entrepreneurs, and lawmakers are wary of that. So Sikes might be forced to use lotteries if he wants to launch the service.

'MISGUIDED.' Perhaps the toughest fight Sikes faces will be over his bid to carve out space on the airwaves for what he refers to as "emerging technologies." He wants to move entrenched users, including electric utilities and railroads, off the microwave portion of the spectrum to make room for

unidentified new services, perhaps including PCNs. But the incumbents don't want to budge. The chairman's solution: Get the upstarts who want the space to pay moving costs, such as new-equipment purchases. So far, though, the idea hasn't made much headway. "Misguided" is a good adjective to use from our point of view," says Jeffrey L. Sheldon, general counsel for Utilities Telecommunications Council.

Sikes will find the going easier when he tries to get the FCC to choose a standard for HDTV. Later this year, an industry advisory panel is expected to recommend one of several HDTV-transmission systems now being tested. But even an HDTV standard, which could give U.S. manufacturers

an edge over foreign competitors, is running into some flak, though not enough to derail it. Critics say the government is likely to pick an inferior technology in a replay of the choice of a color-TV standard 40 years ago. "The government doesn't set a standard for pipe size," notes former FCC Chairman Mark S. Fowler. "Why should it do it for TV?"

Beyond HDTV, Sikes will have to cajole and compromise if his initiatives are to move forward. He may get much of what he wants, but he better move fast. If the latest polls are accurate, he may not have much more time.

By Mark Lewyn



SIKES: AN OVERHAUL FOR REGULATION?

FAL WRAPUP

ADMINISTRATION

talk of another shakeup at the White House is causing bad blood between White House Chief of Staff Andrew K. Skinner and Bush-Quayle campaign chairman Robert B. Moser. Privately, Skinner blames Moser for spreading rumors that Secretary of State James A. Baker III would replace Skinner. But many others question whether Skinner is up to the task. To save his neck, the White House staff chief is going to take a more active role. "He has been delegating too much and not trusting his own instincts," says one close associate in the White House. Watch for

aides W. Henson Moore and Clayton K. Yeutter to be relegated to less visible roles. President Bush has told Skinner "not to worry about losing his job"—yet.

THE CAMPAIGN

Bill Clinton's team has hired Gene B. Sperling as its senior economic-policy coordinator. Sperling was an issues adviser to the Dukakis campaign in 1988 and more recently worked for New York Governor Mario Cuomo as a special assistant on national issues. He helped Cuomo fashion his national economic plan last year, which called for a targeted capital-gains tax cut and investment tax credits.

PEOPLE

Rahm I. Emanuel, the 32-year-old Chicago wunderkind who tapped Wall Street's largess to give Bill Clinton a big boost toward the Democratic Presidential nomination, will soon be moving to the Democratic National Committee. Emanuel has accepted the job of chief fund-raiser for the DNC, where he will help raise money not just for Clinton but for Democrats in state and federal races across the country. Emanuel had help on Wall Street from Goldman, Sachs & Co. partner Kenneth D. Brody. But he also is going after neglected ethnic voting blocs, such as Pakistanis and Koreans.

**CAFE SOCIETY IN
BUENOS AIRES:
A NEW MARKET
WITHOUT WALLS**



LATIN AMERICA

THE BIG MOVE TO FREE MARKETS



Thirty-year-old Juan Pablo Correa scampers about his office in Santiago, Chile, in sneakers as he speaks rapid-fire Spanish. He explains, with a smile, that he's "hyperactive."

Correa shows. Starting a video rental business from a rented rack in a supermarket, Correa quickly built a nationwide chain with 40 outlets. Last year, he crossed the snow-capped Andes to become No. 1 in the larger Argentine economy.

Correa is just a small mover in Latin America's newly open markets. But he has plenty of company. Across the continent, São Paulo, American computer maker Hewlett-Packard Co. is rushing to team up with Brazil's Edisa Informatica to cash in on the country's soon-to-be-open computer market.



NEW ALLIES: AT ITS CAMPINAS PLANT, GE WILL BUILD MOTORS AND LOCOMOTIVES WITH BRAZIL'S VILLARES



BRAZILIAN POVERTY: AS ELSEWHERE IN THE REGION, THE UNDERCLASSES HAVE YET TO BENEFIT FROM THE BOOM

t. And from Venezuela to Argentina, as Iberia Air Lines is gobbling up carriers, readying itself to battle giants in the new open skies over Latin America. market revolution is taking hold in Latin America, and companies are getting into the action. From the icy Strait of Magellan to the meandering Rio Grande, governments are selling off their assets dismantling fortresses of tariffs and subsidies. "It's a new world here," marvels do Brasil Managing Director Carlos Escobar. "It's as if you'd been locked up for years and suddenly freed. You always have to learn how to walk again." In the 1980s, they watched with envy as Americans lost a decade in the Asian Tigers raced ahead with development. But with the grinding

burden of \$400 billion of debt spread out into easier terms, Latins feel that it's their turn now. They're convinced that this time around, modernization will take root. The word on everyone's lips, from government technocrats to company presidents, is "irreversible."

But Latin American countries need billions in investments from home and abroad to remake their economies and give hope to their poor, accounting for as much as 40% of their people. And Latins are in stiff competition for those dollars with everyone from Vietnam to Poland. To move in front, Latin America, led by Chile, Mexico, and Argentina, is quickly remaking itself into a magnet for investment. Governments are deregulating in a hurry and signing regional free-trade pacts. For many, the ultimate goal is a vast, unified market, with Latin

America linked to the U. S. and Canada. A version of this was proposed by President Bush in his Enterprise for the Americas Initiative. Brazil's President, Fernando Collor de Mello, even envisions "complete integration from Alaska to Patagonia."

OLD SCHOOL TIES. The shock troops of change are a new generation of leaders, many of them educated in the U. S. A continental network of Harvard, Chicago, and Stanford grads are back home atop businesses and government ministries spreading a new market mind-set. They're using old school ties to reach across Latin America's borders, signing joint ventures and free-trade agreements with fellow alumni (page 54). These MBAs and PhDs are not afraid of bonding with the U. S. They welcome it. "To cope with the new world situation, it's better to get together," says Mexi-

Cover Story

can President and Harvard PhD Carlos Salinas de Gortari.

The challenge for Latin America's free-marketers is to make sure the new prosperity is more than a veneer. As Latin leaders look beyond downtown Buenos Aires and São Paulo—with their buoyant brokerages and crowded five-fork restaurants—they see the immense underclasses still untouched by the bonanza. If the new money doesn't lift the poor, this latest boom, like all the others before it, is sure to go bust.

As the continent begins its uphill climb, the big neighbor to the north is beginning to notice. With the world dividing into regional blocs, the U.S. is looking south for strategic allies. Latin America, with a booming population of 400 million, represents its fastest-growing export market and the brightest prospect for growth in the '90s. In 1991, Latin America gobbled up \$58 billion worth of American-made goods, an 18% increase over the previous year, and the number is expected to hit \$67 billion by yearend. As Latins rebuild and rewire a continent that was left to crumble for a decade, U.S. companies are shipping capital goods, from Caterpillar Inc. bulldozers to IBM computers. They're buying phone companies and railroads. In a surprising turn, U.S. banks are even seeing part of their Latin debt loads turn into assets on their balance sheets.

Japanese and European companies aren't exactly sitting out the Latin boom. Japan is Chile's biggest trading partner. Siemens, Nestlé, Rhône-Poulenc, and other European companies are revamping their Latin operations for open borders. Nevertheless, the Europeans and Japanese will be operating within what's likely to become an American-dominated market. "I see America as one big market to compete with the European and Asian blocs," says Siemens Brazil President Hermann Wever.

Equally important, Americans now see how much their interests are bound up with Latin America. During the cold war, the U.S. backed anticommunist dictators in the region, engendering widespread resentment and distrust. But now that North and South are run by democracies, the two halves of the hemisphere are beginning to move in sync. It's no longer "Yanqui, go home." Now, it's "Come on down"—with plenty of money and technology.

Americans are also realizing that Latin



OPEN TO THE WORLD: AS BRAZIL'S TRADE BARRIERS COME DOWN, THE PACE IS QUICKENING AT SAO PAULO'S BUSY PORT SANTOS

prosperity not only means exports and growth for the U.S., but that the reverse is true: Latin poverty touches the U.S. through migration, political upheaval, debt default, and ecological devastation. The earth summit in Rio de Janeiro this month is proof. What we're seeing, says Richard Feinberg, president of the Inter American Dialogue in Washington, "is a new hemispheric community tied together by economic flows that competes better in global markets."

DOING BATTLE. The international economy is shaping the new Latin America as well. Companies throughout the region are in flux. Locals and global giants alike, once complacent behind high walls, are retooling plants, hammering out new contracts with unions, and slashing costs (page 56). They're calling in American management gurus and shedding businesses they know can't make it globally. "We have to be

ready to battle the rest of the world in our own region," says Alan R. Chatterback, financial manager of textile and footwear maker Alpargatas, one of the nimblest companies in Argentina.

The money for the battle is beginning to flow. As much as \$50 billion has poured into the region in the past 18 months, up from a trickle just a few years ago. Privatization of everything from the Buenos Aires Zoo to Mexico's 18 commercial banks has been the draw, luring back flight capital along with newcomer investments. Today, Latin stocks are jumping on the charts. Northern investment bankers, who scorned Latin America

a basket case only five years ago, are now hawkling bonds for Venezuelan steel companies, stock in Brazilian pulp conglomerates, and options on Chilean copper (page 60). These companies are the new darlings of Wall Street, with their formidable résumés showcasing how they survived inflation and depression, weathered hyperinflation and sailed the waves of shock therapy.

Many, such as Perez Companac, an oil and telecom conglomerate in Argentina, and tobacco giant Souza Cruz in Brazil, are well positioned to cash in on Latin America's growing markets. Others, such as Venezuela's Sivena, a steel and auto-parts maker with several foreign partners, including Toledo (Ohio)-based Dana Corp., are playing international ties to expand the markets. "There are very few places in the world where companies can see so much growth," says Mario L. Baeza, a partner at Debevoise & Plimpton who is an adviser on many Latin American deals. "It's just there. People are waiting for whatever you have to sell them."

To be sure, not all the countries are moving at the same speed. While Mexico, with its one-party rule, races toward a free trade agreement with the U.S. and Canada, the fledgling multiparty democracy in Brazil struggles daily for consensus in Congress. And while Argentina slams the door on inflation and stuns the world with a one-year turnaround to the markets, Venezuela's efforts slow down as the country regroupes after a failed military coup.

Most of the continent's smaller countries are joining the wave. Paraguay and Uruguay have joined in Mercosur, the regional trading bloc that links them with Brazil and Argentina. Last decade's hotspots, El Salvador and Nicaragua, now bill them-

HOW TO MODERNIZE IN A HURRY, LATIN STYLE

- 1 Privatize everything in sight, from toll roads to sewers
- 2 Crush inflation
- 3 Slash tariffs to world levels
- 4 Open the doors to foreign investment
- 5 Sign free-trade pacts with neighbors and eventually with the U.S.

as low-cost assembly havens. Even
ru's iron-fisted President, Alberto Fuj-
ri, is asking foreign investors to brave
errillas and buy a slew of state compa-
s, including Petroperu. "Each country is
nging in its own way, but they're all go-
in the same direction," says Humberto
dolpho Jr., Pizza Hut International's
e-president for the region.

o far, the payoff from privatization—
benefits of which are primarily long-
n—has flowed to the moneyed classes.
mediate costs are paid by the working
middle classes: Companies go belly up,
workers lose jobs as bureau-
cies and companies trim fat.
t can make politicians' jobs of
hing budgets even harder, with
prospect of riots, strikes, even
ps. Leaders also must ferret
cops and bureaucrats on the
e and battle drug traffickers,
e within their own ranks. Vene-
a's coup attempt was a stark
inder, says Fernando Henrique
doso, an opposition leader in
zil's senate, "that we face tre-
dous social difficulties if the
le believe their suffering is for
ing."

re outlook for Latin America's
omic turnaround, however, is
ful. While Germany, the U. S.,
Japan crawl out of recession,
Latin America is growing this year
he healthy 3%-to-5% range.
e and Mexico are running bud-
surpluses. After years of hy-
flation, Argentine shopkeep-
ow dare to label prices in ink.
ed, investors who three years
eyed the Soviet Union and
ern Europe are now finding
n America a better bet. In the
s, Latin America "will play the
Korea and Southeast Asia
ed in the 1970s and '80s," pre-
Argentina's confident Econo-
minister, Domingo Cavallo.

MARKET FAITH. Latin America's
e to the markets began with
in the 1970s, under the grip
general Augusto Pinochet. But
when Mexico, with its civilian
riment, plunged into open
ets in 1989 did the model be-
attractive. Today, the rest of
America is closely following
co's blueprint. Salinas first re-
tured the state, selling its
portfolio of companies, cutting back
bureaucracy, taming inflation, and
neting debt relief. Now, the country is
modernizing production. Private com-
s are building everything from toll
to phone systems. The next step: Lift
e poor. Salinas has launched a vast so-
rogram called "Solidarity" to bring
clean water and paved roads. Most
tant: decent schools—key to both

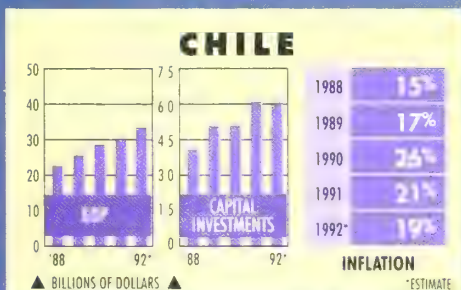
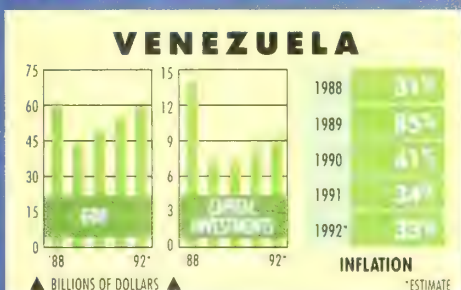
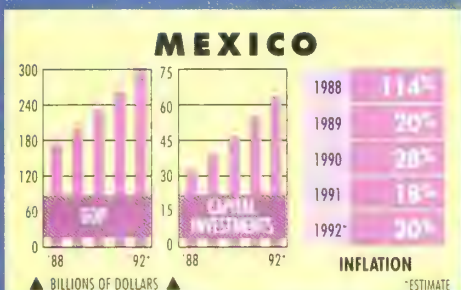
competitiveness and population control,
since educated women have fewer babies.

Now, the more boisterous multiparty de-
mocracies in South America are trying to
follow Salinas' lead. But they're hitting
more potholes along the way. President
Collor de Mello sees reforms tied up in
Congress and admits to the local Brazilian
press that his job feels like a "meat grinder."
Argentine President Carlos Saul
Menem is lampooned daily by a virulent op-
position press. And Venezuela's Carlos
Andrés Pérez, weakened by the failed mili-
tary coup in February, now grapples with

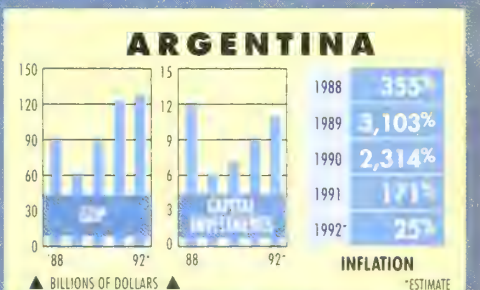
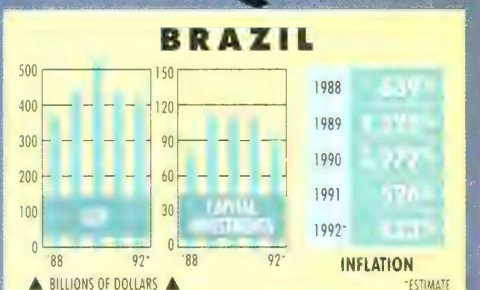
ques ran a small computer-parts factory in
Rio de Janeiro. He was sheltered from for-
eign competition by high tariffs, but im-
porting parts was a bureaucratic night-
mare. Marques had to fill out a three-page,
typewritten tax form just to sell an \$8 im-
ported plug. Now that Brazil's computer
industry is opening up, Marques has land-
ed the Radio Shack distributorship. He has
two stores full of imports and plans to
have 75 by 1996. "The world is forcing Bra-
zil to change," Marques says.

It took a while. Brazil, with its continen-
tal size and population of 157 million, long

LATIN AMERICA IS ON THE REBOUND



widespread strikes and demonstrations.
Still, the market's faith in many Latin
companies seems unflappable. To under-
stand this optimism, it helps to know where
they have come from. For decades, Latin
countries have lived behind high protec-
tionist walls, making everything from cars
to nuclear power plants. Brazil was the
most fanatically devoted to this strategy.
Three years ago, 37-year-old Rogerio Mar-



believed that it was big enough to make
import substitution work. And it did in
many industries. But when the computer
revolution hit, Brazil isolated itself from
the rest of the world, demanding that most
computers sold there be made locally. If
they cost more, that was the price of na-
tional development.

The result was primitive computers cost-
ing five times world prices. As computers

gained a larger role in business and manufacturing. Brazilian companies found themselves operating with a huge handicap. Finally, acknowledging that self-sufficiency was a costly fantasy in a global economy, the Collor government opened the door to imports. Says a relieved Rudolf Höhn, president of IBM Brasil: "Two years ago, you couldn't even imagine these changes would come about." Now, high-tech companies such as Hewlett-Packard and Compaq Corp. are drooling over the \$7 billion-a-year market and setting up joint production and assembly operations with locals.

While Brazil dreamed of self-sufficiency, tiny Chile, with its 13 million people, could hardly escape reality. Run by a dictator who surrounded himself with economic wunderkinder from the University of Chicago, the skinny country moved far ahead of its neighbors, privatizing airlines,

phones, and utilities. Most important, they privatized Chile's pension funds, which pumped billions of dollars into the country's capital markets and pension funds. Now, Chilean companies financed at home are scouring the continent. They're bidding for cellular phone franchises in Colombia and buying up supermarkets, vineyards, and power plants next door in Argentina.

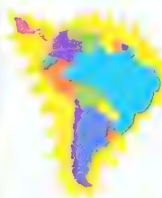
TALKING QUALITY. Chilean companies are the export stars of the continent, shipping copper, lumber, fruit, and even software. They're also finding lucrative niches. A matchstick company called Fósforos Chilenos now ships millions of Popsicle sticks to the U.S. and is breaking into the Japanese chopstick market. And the U.S. and Chile are flirting with a free-trade pact.

Chile's success has not been lost on its neighbors. In the past two years, Argentina's President Menem has embarked upon

the fastest privatization campaign in history. Under Economy Minister Cavallo, the Argentines are selling oil fields, water works, petrochemical plants, even kicking the army out of its Buenos Aires barracks to sell the valuable real estate. Many marvel that the Argentines, who for decades made a fine art out of speculating against hyperinflation, are now beginning to focus on manufacturing. "I hear Argentines talking about quality now," says one banker in Santiago. "Used to be, they only talked about interest rates on yen."

To strangle hyperinflation, Cavallo tied the austral to the dollar, backing all currency with hard reserves. The plan has worked: Inflation has shriveled to 25% a year, from 3,100% in 1989. He still needs to balance the budget in a hurry. In the meantime, he's financing his shortfall with cash from the state sell-off. It's painful, but Ar

THIS LATIN REVOLUTION HAS IVY LEAGUE ROOTS



It has been a busy year for Martin P. Redrado. As the youngest-ever chairman of Argentina's Securities Commission, the 30-year-old Redrado is in charge of remaking his country's stock market.

Luckily for him, he gets a little help from the Harvard Connection. When he was chatting with school chum Jorge Rosenblud, a top presidential aide in Chile, not long ago, the two Ivy Leaguers cooked up a scheme to cross-register companies on their countries' exchanges. His boss, Economy Minister Domingo Cavallo, also is a Harvard grad.

They're all over Latin America, driving the continent's market revolution. Armed with MBAs and economics PhDs from Harvard, Yale, MIT, and other elite American universities, a cadre of technocrats is returning home to attack fusty, discredited economic concepts while pushing for market solutions. Unifying them is a strong faith in numbers and a world view that extends far beyond their borders.

The technocrats came to power during the debt crisis of the 1980s, when Latin governments needed economists to balance their books and coax credits from international lenders. Who better for the job than the English-speaking economists, many with classmates in the banks and the International Monetary Fund? With that foot in the door, the whiz kids rose to the top.

Today, some are presidents, such as Mexico's Carlos Salinas de Gortari. And more are on the way. In Mexico alone, at least 42 government scholarship students

are returning with PhDs from leading U.S. universities this spring. Most of them will carry the modernization flag straight into government ministries and the state oil monopoly, Petróleos Mexicanos. "Thank God we didn't cut scholarships to the U.S." during the lean years, says Finance Secretary Pedro Aspe, an MIT alumnus and close friend of Argentina's Cavallo.

TEST CASES. With the Latin economies as their laboratories, these U.S.-educated planners are putting their training to its most practical tests. Those in government posts are selling off state companies, deregulating financial markets, and erasing trade barriers. Others are applying classroom theory to family businesses or opening new companies of their own. This global-minded generation, with its flawless English, is pushing aside nationalist graybeards who ruled for decades. While they're as patriotic as their parents, they also feel allegiance to one another and to their beliefs. Says Redrado: "We're all on the same wavelength."

Perhaps the greatest challenge facing these technocrats is building wide popular support for their theories. While they can design blue-chip programs, few have mastered the political skills it takes to sell a radical change to the people. The flight of these elite scholars to the rich, prestigious north can also deepen

class divisions as less privileged Latinos remain at home to study at the crumbling national universities. Some do say the foreign-trained technocrats are their national souls.

On the whole, though, the new generation is breathing life into the regional economies. Andrés Duarte is wasting little time putting former state business to work for him. The 48-year-old Venezuelan, who did graduate work at Northwestern University, is snapping up assets for his commodities-trading company in Caracas. A few years back, he bought an abandoned port for a \$250,000. "I smelled privatization in the air," he says. With its own dock, stevedores, and even customs agents, Duarte Vivas began to boom, serving companies that trade in raw materials, chemicals, and agricultural and petroleum products. Now, the company plans to add refrigeration facilities for bananas and other perishables.

The \$400 million company also is well-placed to take advantage of the demise of state monopolies on cocoa and coffee that were freed up by private trade a year ago. Already, Duarte is the country's biggest sugar broker, since the state-owned sugar mills were spun off last year.

Latin America's new generation dismissed the handwritten ledger and manual typewriters



DUARTE: SNAPPING UP VENEZUELAN ASSETS

entines say there's no turning back. Menem is going along the only route he can," says Oscar Vicente, vice-president of oil and telephone conglomerate Perez Companc. "There's no other way."

Limited options are even squeezing Brazil, the continent's powerhouse. Collor, a president from a tiny party, meandered for nearly two years, trying various shock therapies. They all flopped. Brazil's course changed dramatically in mid-1991 when Collor tapped Marcilio Marques Moreira, a former banker and then ambassador to the U.S., to put a serious face on economic policy. Marques Moreira quickly gutted price controls, lowered tariffs, and adopted a gradual but unswerving anti-inflation plan. Despite the roller coaster, Brazilian businessmen, for the first time in a decade, are fairly optimistic. They're making progress with the government on gripes about everything from copyright piracy to exorbitant port taxes. And even some labor

unions are agreeing to change, despite workers' fears of unemployment. "If we don't open up, we lose the race to be competitive," says Luiz Antônio de Medeiros, head of union federation Força Sindical in São Paulo. "In the long term, not opening would be worse."

HUMAN CAPITAL. Like Medeiros, many Latins regard their choices as grim. Ramon Correa, an Argentine bus driver, hasn't made a cent from the booming stock market. He says he works 60 hours a week to pay his bills and maintain his small house in the industrial suburb of Quilmes. "I'll probably still be paying for my last operation when I have the next one," he predicts. But despite his dour outlook, Correa is investing in the future, helping put his son through accounting school.

Investing in its people is the key to Latin America's success. For half a millennium, Latin economies have depended on natural resources and land, not people, to create

wealth. Small oligarchies rode the continent's gold, coffee, wheat, and oil to fabulous fortunes, while millions of poor worked the fields and mines. Consensus for change came recently as Latin America has watched nations like Korea and Taiwan, whose only resources are their people, race ahead.

Will Latins seize the moment? Unlike the Asians, or even ex-communists, the Latins face the challenge of training huge underclasses, parlaying their poor from a liability into an asset. "Our people are our capital," says Mexican Finance Secretary Pedro Aspe. True. But they'll have to develop that capital on the run. For the global race to the marketplace is under way, and the Latins are already springing off the starting block.

By Stephen Baker and Elizabeth Weiner in Buenos Aires, with Geri Smith in São Paulo, Ann Charters in Caracas, and Ken Jacobson in Santiago

redominate. For modernization computers. So, look to 43-year-old Navarro. In just out of engineering school, he starts small systems any, Sonda, just as was starting free-reforms, and it

the past four years, Navarro has set up offices in 13 countries and brought in Digital Equipment Corp. as a

partner. Now that the rest of the region is following Chile's economic model, Navarros ready with systems it will need. Navarros growth is ticking along above average with sales projected to top \$80 million this year.

Like many of his software clients, Navarro studied at home, at Santiago's Catholic University. But he took a year of school in Richmond, Va. And he mixes with the new generation. "The people were very good at dealing with the governments, getting permits," says Navarro. "Now, it's a different game with companies facing pressure to increase productivity." That new game keeps Navarro busy for a while.

BUT WARM. Nowhere in Latin America has the market revolution had a prickly welcome as in Brazil, where powerful industrialists, labor leaders and politicians have fought to protect privileges in the closed economy. Now it was to save subsidies, wage controls, or jobs, resistance to change has been fierce. It is Economy Under Fire. Dorothea Werneck's job to bring down that opposition and bring



REDRADO: RESHAPING ARGENTINA'S MARKETS

some of Brasília's toughest critics to the negotiating table. Werneck, 43, spends long days in the hot seat, thrashing out pacts with anxious auto workers, computer makers, toy-makers, and other sectors for new tariff levels, wages, and quality goals. "I tell them if we do nothing, our [industries] will end," she says. "If we want to save them, we must work together."

Her approach seems to be working. In March, an auto-industry group, led by Werneck, reached an unprecedented agreement that resulted in an immediate 22% drop in car prices. Dealers agreed to reduce earnings 3%, manufacturers and auto-parts makers took a 7% profit cut, the government agreed to a 12% tax reduction, and workers signed on to a postponement of wage hikes in exchange for job security. Says Werneck: "We are seeing an incredible cultural transformation as our companies realize that they need to produce high-quality goods and deliver them on time to survive in a global environment."

Werneck, too, studied in the U.S., doing doctoral work in economics at Boston College. But Werneck is as much politician as technocrat, and her tough but warm

manner seems to serve her well as the point woman for Brazil's economic policy. One crusty industrialist thought he was complimenting her a few years back when he announced: "She's very intelligent, even though she's a woman." The comment caused a stir, but Werneck laughed the incident off, making *Even Though She's a Woman* the title of the autobiography she published in 1990.

TIME BANDITS. Not all the new technocrats have that kind of political savvy, and their lack of salesmanship could spell trouble ahead. Take Colombia's President César Gaviria. Only 45, he is a trained economist following today's Latin recipe book on the economy.

But Gaviria's approval ratings are low. True, running the violence-prone country would be daunting for anyone. But it didn't help matters much when, after a run of blackouts from a record-setting drought this year, Gaviria decreed that the country would shift suddenly to daylight savings time. The move backfired:

Outraged citizens accused the president of messing around with "God's time." Complains one Bogotá resident: "This government has even seen fit to rob us of an hour!" Good economists may equal good politics these days, but good economists still have a lot to learn about being good politicians.

By Elizabeth Weiner in Buenos Aires and Stephen Baker in Mexico City, with Geri Smith in Rio de Janeiro, Ann Charters in Caracas, and Ken Dermota in Bogotá



WERNECK: FIGHTING FOR CHANGE IN BRAZIL

PIECE OF THE PIE:
PIZZA HUT HAS
110 LATIN FRANCHISES
AND AIMS FOR 500



MULTINATIONALS STEP LIVELY TO THE FREE-TRADE BOSSA NOVA

As markets open up, U.S. companies scurry to revamp and regionalize their Latin operations



multinational companies shifted uneasily in their seats around the conference table in the Economy Ministry's stark, modern meeting salon. They were waiting for their regular luncheon with Economy Minister Marcilio Marques Moreira, whose no-nonsense style had always inspired confidence. The Minister was late—and Brasília was rife with rumors of an impending political shakeup by President Fernando Collor de Mello.

When Marques Moreira finally walked in, he stunned the group with the news that Collor had asked his entire Cabinet to resign. Then, after a pause, he brought the executives to their feet in a standing ovation with the laconic addendum: "The President asked me to stay on the job."

Partly, the applause was in recognition of Marques Moreira's success so far in moving Brazil toward a more stable, free-market economy after years of inflationary crises and statist controls. It also underscored the unabashed welcome that U.S.

companies now sense in Brazil—and in most of Latin America—after decades of contradictory policies. Over the years, Brazil has attracted big investments by companies such as General Motors Corp. and Volkswagen, but Brasília has also hobbled carmakers and other manufacturers with oppressive regulation inspired by bouts of nationalism. One example was Brazil's rules barring foreign companies from the personal-computer business.

'NO FLAG.' That kind of heavy-handed regulation is being eased in many countries. Argentine President Carlos Menem has ended discrimination against foreign companies, insisting that "capital carries no flag." And in Brazil, the blue-chip Foreign Investors' Group meets every two or three months with Marques Moreira to discuss ways of improving the business climate. Representatives of U.S. companies include the heads of Brazilian subsidiaries of IBM, Cargill, and American Express. "We don't get together with the Minister just to shoot the breeze," says São Paulo publisher Christopher Lund, a former president of the American Chamber of Commerce for

Brazil, who coordinates the group. "To make actual progress" on issues—such as a tax cut on remitted profits that the group suggested and the government adopted.

Across Latin America, the market opening is allowing multinational companies to draw a hodgepodge of high-cost operations, originally set up to do business in protected markets, into their worldwide strategies. That could lift their profits and strengthen their position against global competitors—particularly the Japanese. With few major manufacturing investments in Latin America, Japanese companies are so well positioned to cash in on the region's recovery. For U.S. companies, it all adds up to "the biggest opportunity in Latin America in 50 years," says Zeke Winer, president of software maker Oracle Corp. Brazilian subsidiary.

American investors, and Europeans well, are breaking through many onerous sensitive cultural barriers. Pizza Hut International would once have been seen as a *Yanqui* assault on local cuisine, yet it has 110 franchises from Chile to Mexico and aims for 500. Hungry for a taste of

an style, Latin Americans are also looking to Benetton Group's 316 stores in Latin America. Latins are also displaying a more welcoming attitude toward foreign investment in politically sensitive businesses including petroleum and mining. To be sure, Americans are testing the waters more cautiously in South America than in next-door Mexico. U.S. exports to the region are up (chart), but Americans are not laying out up to \$700 million a year for brand-new plants in the rest of Latin America as they have in the past.

When you get ready for that day, multinationals are rapidly adapting their operations in the region. The aim is to pre-empt sheltered subsidiaries and global competition as trade barriers fall. These units are going to modernize, cut costs, and raise product quality. They are linking operations across national borders to take advantage of lowered trade barriers. In some cases, they are acting as forces in strategic alliances with local companies.

Of course, such transactions are as easy to dream up in corporate headquarters. Carrying out on the ground is still a tough job. Executives in Brazil ship through ports that charge steep prices for abominable service. And try juggling very different inflation rates while consolidating business across borders.

CAT PLANTS. Despite all these obstacles, companies are moving ahead. Consider Xerox in Brazil. As Brazilian tariffs have lowered costs drastically by replacing local material components with cheap imports. In years past, the government required Xerox to use copiers with up to 90% local content. Xerox has slashed that by 30% by lowering local content from 90% to 40%. That's a competitive gain for Xerox worldwide, since the Brazilian company exports components to Xerox plants in other countries. But the market opening is heating up competition in Brazil: In less than two years, Xerox' share of the Brazilian market dropped from 96% to 80%. For nearly a half-century, U.S. companies organized their Latin American operations for a patchwork of small national markets, separated by protectionist walls. Some, that meant building copycat plants in each of a dozen countries. Now, there are opportunities for rationalizing operations by better matching of markets with manufacturing capacity, and in some

cases, by shutting down unneeded plants.

Dow Chemical Co., for example, has factories making latex and emulsions in both Brazil and Argentina. In the past, it would have had to expand the plants separately to meet demand in each market. Now, Dow is trading products between Brazil and Argentina and won't expand either facility until the capacity of both has been used up. It is also swapping products between plants in Venezuela and Colombia. "We cannot afford any more to build for one

target is Argentina, a partner in Mercosur—the free-trade bloc set up by Argentina, Brazil, Paraguay, and Uruguay.

General Electric Co., meanwhile, is pushing hard to raise its Latin American productivity to world levels. In Brazil, GE makes capital goods such as railroad locomotives and motors along with other products from lamps to plastics. While the company is expanding headlong in Mexico, notably in joint ventures making gas turbines and plastics, in South America "we are investing in productivity and quality," says Kurt J. Meier, chairman of São Paulo-based General Electric do Brasil. And GE is demanding improved performance by local suppliers as well. "We give [a supplier] a reasonable time to get down to world costs," Meier says. "If not, we import."

CRANE SELLING. To keep its locomotive business alive, though, GE is putting it into a 50-50 joint venture with Villares Group, a Brazilian conglomerate that was a GE rival till now. Both have been battered by the drop in Brazil's appetite for heavy capital goods in the past five years. "We have to rationalize [production] to maintain the technology within the country," Meier says. To do so, GE and Villares are spending \$90 million to move Villares' equipment for building locomotives, electric motors, and overhead cranes to a joint facility at GE's Campinas plant near São Paulo.

By contrast, IBM recently set up a personal-computer joint venture with Villares for a very different motive: to get a fast start in the rapidly expanding PC business, which Brazil is opening to foreigners on Oct. 28. To survive, Brazilian computer companies are looking to team up with U.S. partners such as IBM and Hewlett-Packard Co. Under the old law, IBM Brasil was allowed to build mainframes. Now, with the end of Brazil's restrictions, it is free to start manufacturing PCs or import them on its own. Instead, IBM has formed a joint venture with Villares, formerly an IBM distributor, to import work stations, taking advantage of Villares' established customer base. IBM also has deals with three other Brazilian companies to assemble computers and provide services.

For U.S. oil and mining companies, what's crucial in Latin America's new free-market climate is not the lowering of trade barriers. It is the about-face from heavy government regulation and frequent hostil-



market and pretend it's going to be protected from competition," says Dow Venezuela President Frederico Montaner.

While some companies are streamlining, others are retooling to make their operations more competitive. Cummins Engine Co.'s Brazilian subsidiary makes diesel engines and supplies components to Cummins plants in other countries. To compensate for a sharp drop in local sales because of Brazil's recession, Cummins plans to spend \$40 million to expand exports. One

If an image is worth a thousand words, imagine what imaging is worth to you.

Your strategic picture. Like the strategic pictures of businesses and governments around the world, that's what Unisys had in mind when we designed our InfoImage family of imaging solutions.

The benefits go beyond reductions in paperwork. Beyond protecting the integrity of originals. Even beyond savings from enhanced productivity. For InfoImage solutions not only help you process applications quicker, handle claims more efficiently, and respond to customers faster. They also help you create marketable, revenue-generating new services.

Whatever your business and whatever it's built on—checks or claims, correspondence or blueprints or signed authorizations—our imaging solutions enable you to capture documents electronically. You can move them throughout your enterprise, gain simultaneous access to them, and put them to work growing your business.

As a leader in imaging, we know that truly advanced solutions do not consist of technology for

technology's sake. Beginning with a careful understanding of the customer's needs, we apply imaging technology to reflect the unique flow of information within an organization. And our InfoImage Professional Services recognize that an imaging solution isn't a solution unless it's integrated into the customer's existing systems.

Whether you're in finance, government, travel, telecommunications or any other service industry, call us at 1-800-448-1424, ext. 139. Ask how our imaging solutions can help improve your business picture today.

UNISYS
We make it happen.

ity against foreign investors. In mineral-rich Peru, for example, President Alberto K. Fujimori plans to privatize all state-owned companies, including mines expropriated from U.S. companies decades ago. First Boston Corp. and Chase Manhattan Corp. are helping organize the sell-off of formerly American-owned properties.

In oil, the shift in attitude is most notable in Argentina, which is selling off once-protected production rights and plans to privatize the national oil company, YPF. But the rigid ban against any foreign role in exploration and production is weakening in oil-rich Venezuela, too. The change in sentiment is being speeded by the cash squeeze on the national oil company, PDVSA, which is strapped for money to carry out expansion plans.

NO SMOOTH RIDE. A sign of the times is the return to Venezuela of Exxon, which lost 1 million barrels per day of oil production when its operations were nationalized in 1975. It has reopened a Caracas office, Exxon Services Venezuela Inc., to pursue ventures such as a proposal, with partners, to build a \$2 billion liquefied natural gas plant. Within a decade, Exxon Vice-President Bill Baisley predicts, "you're going to see a major part of the Venezuelan oil industry be operated under joint-venture agreements."

Despite the free-market reforms, U.S. executives hardly expect a smooth ride in Latin America. While the broad move toward private enterprise is unlikely to reverse, governments will still come and go, and rules can change. To be an investor in Latin America, says Brian Hill, head of Cargill Inc.'s Brazilian operations, "you have to be comfortable with the swings."

The irony is that in this region, Americans may be better at riding out the swings than their Japanese competitors because they have deeper roots. GE set up its first business in Mexico in 1896, and Gillette Co. started manufacturing in Brazil in 1931. Europeans, though less numerous, are also well entrenched. But the inevitable Latin ups and downs, while frustrating to all foreigners, have been a particular turnoff to the cautious Japanese. With few exceptions, they have been reluctant to make major commitments in manufacturing.

As a result, Americans are strengthening their stake in rapidly growing markets where their toughest worldwide rival is not well represented. The flow of profits and the economies of scale from Latin America are likely to reinforce U.S. multinationals' global competitive strength. So, while the region's economic revival is restoring hope for Latin Americans after a decade of stagnation, for U.S. companies competing worldwide it is also very good news.

By Geri Smith in Rio de Janeiro, Gail DeGeorge in Caracas, and John Pearson in New York, with bureau reports



BRAVE NEW FINANCIAL WORLD

Investors in Latin America are betting the region can only grow



Lunchtime crowds on Calle San Martin in Buenos Aires jostle for a view of the financial data displayed in windows of the exchange houses and brokerages.

Just two years ago, their concern was how fast Argentina's currency was falling. Now, the noon-hour gawkers are catching up with Argentina's surging stock market. A 10-hour plane ride north, in Mexico City, Swiss bankers also have a new approach to the markets. Not so long ago, they were discreetly salting away deposits from jittery Mexican investors into safe baskets of yen, dollars, and Swiss francs. Now, the bankers are offering Mexican stocks and bonds—and those same clients are scooping them up.

Privatization fever has jolted Latin America's once-moribund financial markets back to life. In the past 18 months, an estimated \$50 billion has poured into Latin America, much of it from the \$250

billion that Latins themselves se abroad during the past two decades. T inflow has turned shares of such recently privatized Latin companies as Telefonos de Mexico and Compania de Telefonos de Chile into some of the best performing issues in the world.

Without doubt, Latin America has centuries-old record of short-lived investment bubbles that burst with frightening force. Yet many Latins insist the boom is different. In embracing democracy, free trade, and tough monetary policies, they maintain, many Latin countries are laying the foundation for sustained growth and vibrant capital markets feed hungry companies. "People are taking a more long-term view now," says Jordi Wiegierinck, head of asset trading for NMB Bank's São Paulo operations.

SURE THINGS? If true, that's good news for both Latin American and U.S. financiers. Already, J.P. Morgan, Bank of America, Chase Manhattan, and Citibank are going head-to-head with Salomon Brothers, First Boston, and Goldman



The new HP PaintJet XL300 lets you make a splash without getting soaked.

At last. A printer with fantastic color and a brilliantly low price. \$3,495.

Vivid color has never been so affordable. Hewlett-Packard introduces the PaintJet XL300 inkjet printer. Now you can get laser-quality color printing for about half of what you'd expect to pay. Only \$3,495.*

With access to millions of colors, you'll be amazed at the output you can create. Rich, vibrant, professional color graphics. Crisp, clear, laser-quality text. And you can print in a wide variety of sizes, on a choice of media that includes plain or glossy paper and transparencies.

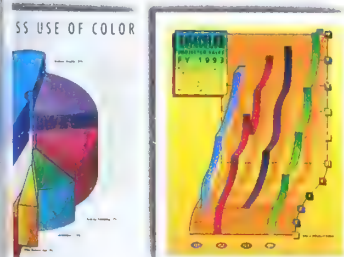
As versatile as it is practical, the PaintJet XL300 switches effort-

lessly between PCs and Macintosh. And, with HP LaserJet printer compatibility built right in, the PaintJet XL300 lets you run all the popular software.

Now that there's a color printer as practical as the PaintJet XL300, maybe it's time you took the plunge into color. Call **1-800-752-0900, Ext. 3160** for a free print sample and the name of the authorized HP dealer nearest you.



**HEWLETT
PACKARD**



Sachs to do everything from underwriting to swaps. "Latin America is an important place for us now," says Chase Manhattan Chairman Thomas G. LaBrecque. "It will be an incredibly important place in the future."

Bankers are targeting a crop of companies that were little known outside their closed markets as little as two years ago. Then, Latin America's *bolsa* boom (table) lifted them into the world limelight. With ports, telephone systems, and railroads all in desperate need of repair after decades of disinvestment, capital-goods producers are looking golden. So are retailers and food processors, as consumer spending blossoms again under sound-money economic policies in Chile, Argentina, and Mexico. If regional growth gets anywhere near the 4%-to-5% groove that many predict for this decade, says Mario L. Baeza, a partner with Debevoise & Plimpton, "any company with halfway decent market share will clean up."

CALMING EFFECT. That potential is drawing investors from around the globe. Since 1989, Mexico, Argentina, Venezuela, and smaller countries have signed far-reaching deals with foreign banks to exchange billions in bad debt for new issues of government bonds backed by rock-solid U.S. Treasuries as collateral. Those deals diminished investor worries that the debt could sabotage Latin countries. Along with Latin America's return to growth, this newfound calm has cleared the way for many companies to bring equity and bond issues to market.

Take Brazil's Aracruz Celulose, a behemoth paper-pulp producer advised by Salomon Brothers, Goldman Sachs, and Morgan Stanley. On May 27, after a two-week U.S.-European road show, Aracruz sold \$135 million in American Depositary Receipts. The Venezuelan steelmaker Sivensa and Argentine oil-and-telecommunications conglomerate Perez Companac have also raised hundreds of millions apiece recently.

These and other deals trace their lineage to Teléfonos de Mexico, the Mexican state phone monopoly. With U.S.-Mexico free-trade talks whetting investors' appetites, President Carlos Salinas de Gortari in 1990 auctioned off a controlling stake in Telmex for \$1.8 billion. Since then, Telmex shares have quintupled. Eager to cash in, the government has periodically sold more Telmex shares. With that money on June 1, it bought back, at a discount, a huge \$7.2 billion of its foreign debt.

Following Telmex, companies such as

Cementos Mexicanos, glassmaker Vitro, and TV titan Televisa rushed to Wall Street and the Euromarkets to sell billions more in stock and bonds. So rapid was the inflow of cash that Mexican bond yields fell from 15%, to 8%, prompting investors to head even farther south in search of fatter returns.

Indeed, the Buenos Aires *bolsa* led the world's stock markets last year, its index quadrupling in dollar terms. This year, the São Paulo exchange is up 50% as banks and brokers worldwide set up new mutual funds to buy Brazilian stocks. Even the de facto regime in Peru, besieged by guerrillas and shunned by the rest of the hemisphere, is winning some adherents. More and

native deals. Bankers Trust Co. last year led a \$100 million issue of Mexican government bonds attached to warrants tied to the local stock exchange index. "The rating agencies say Mexico is just investment grade," says Miguel Miegia, Bankers Trust's Mexico City representative. "The market doesn't agree."

As the rating agencies note, the Latin finance boom is occurring despite lingering political and economic questions. Even as Venezuelan President Carlos Andrés Pérez fought off an attempted military coup, for instance, the national oil company Petróleos de Venezuela was issuing \$400 million in Eurobonds. And while Brazil is struggling to restructure \$41 billion of its foreign debt, investors have few qualms. They still snap up new Eurobonds issues from such Brazilian industrial powers as Petrobras and CVRD, a mining group.

Latin America's *bolsa* mania has yet to extend to many of the region's smaller companies, however. While the Latin blue chips can land financing in their home or in international markets, many companies are simply too small to qualify for a *bolsa* listing and are forced to raise money from local lenders at 30% a year and "We need some sort of over-the-counter market," says José Corral, partner in Analisis Corporativo, a Mexico City-based venture capital fund, "or these small companies are going to die for lack of financing."

VAST MARKETS. This rift between big and small has long dogged Latin America. Even the current push in Argentina and Mexico to follow Chile's example and privatize pension funds is unlikely to help smaller companies. Chilean pension funds now have \$13 billion invested in the markets. But only the country's 50 companies enjoy access to the money, says Alberto Libedinsky, executive vice president of Estrella Americana, a Santiago-based venture-capital fund.

The money pouring into Latin America gives leaders a chance to modernize not only the region's roads and telephones, but its financial system as well. The challenge is to create new markets that reach downward, financing everything from start-ups in Mexico City to low-cost housing in Buenos Aires. That might be the crucial link needed to keep Latin America up and running—and the boom and bust cycle for good.

By Stephen Baker in Mexico City, and Geri Smith in São Paulo, Elizabeth Wein in New York, and Ken Jacobson in Santiago

BOLSAS ARE SIZZLING SOUTH OF THE BORDER...

Market	Market value Billions of dollars	Price-earnings ratio	1992 total return* Percent
BRAZIL	\$65.1	18.3	74.2%
CHILE	36.7	17.9	28.6
MEXICO	136.0	17.1	25.2
ARGENTINA	26.0	31.7	14.1

...AND THAT'S KEEPING LATIN FUNDS ALOFT

Fund	Price per share**	1992 percent change
CHILE	\$38.50	61.8%
BRAZIL	20.75	40.7
LATIN AMERICA EQUITY	18.00	33.3
MEXICO	25.25	13.5
ARGENTINA	14.85	4.5

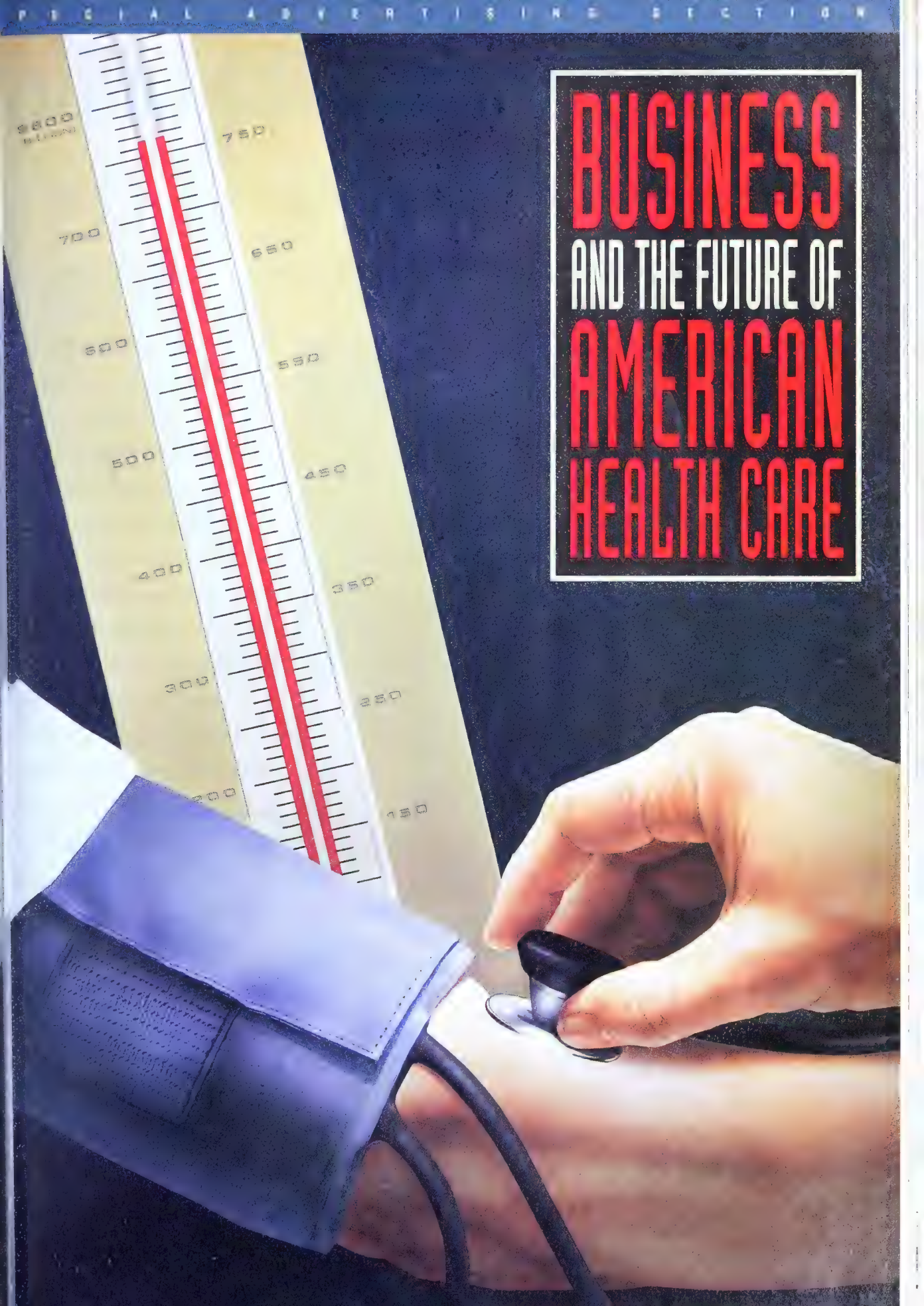
*In dollars **May 27

DATA: MORGAN STANLEY & CO., BRIDGE INFORMATION SYSTEMS INC.

more, investors seem willing to face Latin risks they wouldn't have considered six months back. "What an investor should look for is an awesome company with a less than investment-grade address," counsels Kathy O. Galbraith, a senior vice-president at Chase Manhattan Bank.

The Latin resurrection is lifting up lenders who got sandbagged during the debt crisis. Over the past few years, many of these lenders traded near-worthless loans for cheap shares in many of the same corporations that have gone public and whose shares now fetch a pretty price. Chicago's Continental Bank, for example, has recorded "significant capital gains," says Vice-Chairman Richard L. Huber, by cashing in some of its equity investments in Chile's power company, among others.

Banks are also putting together imagi-



BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

We found \$30 billion

We found \$200 million for one Fortune 500® company. And \$32 million for another.

We're finding millions for big companies and small companies. Perhaps you'd like us to find something for you. We can. By applying

better management to the purchase and delivery of health care.

Our experience in lowering medical costs suggests that the wide adoption of our program and techniques could save American business \$30 billion. Annually.

Easier said than done, you say? True, what we have may not be a panacea. Because there isn't one. The problem is too complex for that.

But what we can offer your company are

solutions that are working right now out in the real world. Solutions that can help you control costs without sacrificing the quality of care. In fact, our goal is to improve it.

And we can do it in a way that employees won't find hard to swallow.

Let's get started. You don't have to leap into the future. You can take it one step at a time. Because we offer such an array of product



Would you like some?

and services, we can bring you along at the pace that suits you.

Our health care options include everything from traditional indemnity plans and preferred provider networks to HMOs and plans that integrate our HMO and indemnity options.

And each one offers you successively higher levels of cost controls.

So, how do we get your employees on board?

The key is flexibility and freedom of choice. And making sure that quality is not compromised. Recently, for example, 94% of the members enrolled in our healthplan rated their physicians highly.

Not a bad barometer of employee satisfaction.

With our integrated health care programs, your employees can receive medical care from physicians within an HMO network or select physicians from outside the network.

Giving them access to the best features of both HMO and traditional indemnity insurance coverage.

What's in it for you? Combining choice and the kind of health care management we're talking about helps you rein in runaway costs, giving you greater administrative convenience and efficiency.

How committed are we? So committed we have created one of the most extensive health care networks in the country. Serving 75% of urban markets and over 2 million people.

So committed we've created the nation's leading provider of employee life and health benefits.

So committed we can help you in everything from health and dental care to life and disability plans, too. Call CIGNA Employee Benefits Companies, 1-800-782-0782.

And we'll show you how to find what every company is looking for. Your rightful share of \$30 billion.

We get paid for results.®





Finding a dental plan is one thing.
Finding its participating dentists is something else.

Things are different. And your employees are too. They're under contract with a dental plan. Not Delta Dental. Our two-thirds, full-practicing dentists are not under contract with us. That means that even though our employees are free to choose any dentists, there's an excellent chance that their personal dentists are in our network. □ Our participating dentists help ensure quality care at affordable prices by agreeing to follow procedures relative to treatment reviews and fee limits. That's why they're the cornerstone of Delta Dental's unique three-point system that also incorporates extensive cost management features and plan design flexibility. □ It's a program only Delta Dental offers. That's why we now cover more than 22 million people in 28,000 groups and pay more than \$2 billion a year for dental care. To learn more about how your group can benefit from Delta Dental's **800-441-3333**  **Delta Dental**

Delta Dental

An agent's Location in Directed Health Plots

I N T R O D U C T I O N

By Dr. C. Everett Koop

t long last the health care crisis is working its way to the top of the national agenda, and it's about time. American leaders — in business as well as in government — dawdled until the crisis deepened, and now they are being shamed into action by the American people.

Like many of our big national problems, the health care crisis is a very complicated problem, and therefore it is for a variety of solutions: public and private; national, regional, and local; and personal. But there is no magic bullet. There are no easy answers, only hard choices. It may take us as long as a decade, even though we would improve year by year along the way.

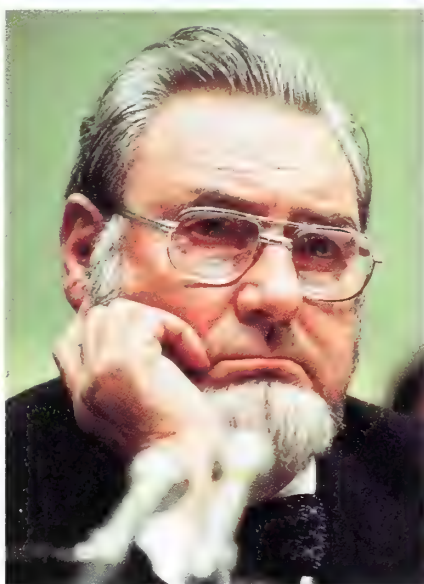
Americans have three basic demands for health care: immediate access, high-quality medicine, and limited price. While it is not too difficult to deliver any two of these, it may be impossible to have all three. The politicians know this, but until they have not had the courage to confront the underlying forces that drive up health care costs.

The 37 million Americans without health insurance do not get as much health care as they should, and when they do get it, the costs are passed on to others. Our current health insurance structure often operates like a free-for-all game, a national disgrace. Instead of competing with each other about who will exclude from coverage, health insurance companies must compete on how well they bring sick and healthy people together in pools to make affordable health insurance available to every American.

Ironically, although some Americans get too little health care, the real problem is that too many Americans get too much health care. In our greatest national enterprise — health care spending — we know very little

about what works and what doesn't. We spend billions on tests and procedures that patients don't need or want, and that some doctors don't really understand. The amount of health care consumed by Americans varies widely,

TERRY ASKE - TIME MAGAZINE



depending upon where they live. For example, Bostonians receive almost twice as much hospital care and at twice the cost per capita as residents of New Haven, Connecticut. Yet there is no evidence that the people of Boston need more care or that they live longer or are happier because they receive more.

If Boston figures were reduced to the level in New Haven the annual savings could be 300 million dollars, (which would more than pay for what the uninsured lack). We can avoid much of health care rationing by reallocating excess health care resources.

We must reform the medical malpractice mess so that doctors and patients do not view each other as legal adversaries. The doctor-patient relationship can be restored, but it will take commitment by people on both ends of the stethoscope.

We need a rational plan for the training and allocation of physicians that addresses patient need, not the staffing needs of hospitals or the financial needs of medical school graduates over-burdened with educational debt. We have too many high-priced specialists in the suburbs, too few primary care physicians for rural or inner-city America.

Our health care crisis is exacerbated by the shameful prevalence of poverty in this rich country, and we must remember that health care expenditures that take away from our efforts to reduce poverty may not result in greater health.

It would be easier to enact the sweeping reforms we need in health care if we could agree on the basic values and ethics upon which our health care system — and our society — is based and from which it derives its moral power. If we could reach an ethical consensus, many of the economic and political problems of health care reform would be easily solved.

Above all, we must assume personal responsibility for our individual health. We can no longer afford to rely solely on reparative and rehabilitative medicine, and all our efforts at health care reform will come to nothing if reform is not undergirded by a widespread ethic of prevention. ■

The text for this special advertising section was written by Kevin Hopkins, a senior fellow and former director of health care research at the Hudson Institute. He also served in the White House as an advisor to the President on labor and health issues in the early 1980s. He is author of several studies and books on health care and labor-related issues.

The text represents one view of how to solve the health care crisis. The editorial staff of *Business Week* was not involved.

BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

PART 1

It is the vision of a nightmare. The Health Control laws have become increasingly rigid: No health care may be performed outside government hospitals, and only people who qualify under the Health Control Act are eligible for medical care at all.

In the laws' wake has arisen a world of underground medicine, in which couriers called "bladerunners" steal medical supplies for renegade doctors who practice tabletop surgery in dark back rooms — the only salvation for the millions unable to qualify for legal health care.

It wasn't always this way. But the signs were growing clear by "late in 1992." By then, harried doctors were spending half their time filling out Medicare forms, seeking to justify to government agencies the treatments they wished to prescribe. In Washington, political leaders had "enacted multitudes of costly old-age benefit programs to be financed by taxing the young and producing members of society."

Inevitably, the quality of medical care plummeted, "with huge crowds holding the clinics open until late at night . . ." The "endless waits to be seen by a doctor — any doctor — and the [growing] depersonalization" of medicine made it "ever more difficult to achieve the close doctor-patient relationships once so important to good, concerned medical care."

The government belatedly pledged to increase access to health care, a step that "promised to double once again the already staggering cost . . ." Meanwhile, a secret report warned that "a massive economic breakdown would occur before the year 2010 unless some way could be found to . . . curb expenditures on medical programs . . ."

Things couldn't go on like this, of course. And when the Health Riots erupted in 1994, it was clear they would not.



AMERICA'S FAILING HEALTH CARE SYSTEM

Breakdown Dead Ahead

A medical nightmare: The scenario reads like the newest offering from medical-horror maestro Robin Cook. But this grim portrait of 21st century America is actually drawn from a different work of speculative fiction — the science-fiction writer Alan Nourse's dystopian novel *The Bladerunner*.

Published, as it happens, in 1974.

Mr. Nourse's prescient musings might be dismissed as nervous late-night fantasies, a flight of hyperbole, or simply a lucky guess. But if you think they're "only fiction," you haven't been reading the papers lately:

■ **Item:** Health care expenditures which accounted for less than 5% of the nation's gross national product in 1950, will consume 14% of GNP this year and, by some estimates, as much as 40% of GNP by the year 2030.

■ **Item:** These rising medical costs are driving health insurance premiums sky-high — and helping to force as many as 37 million Americans to risk going without health coverage.

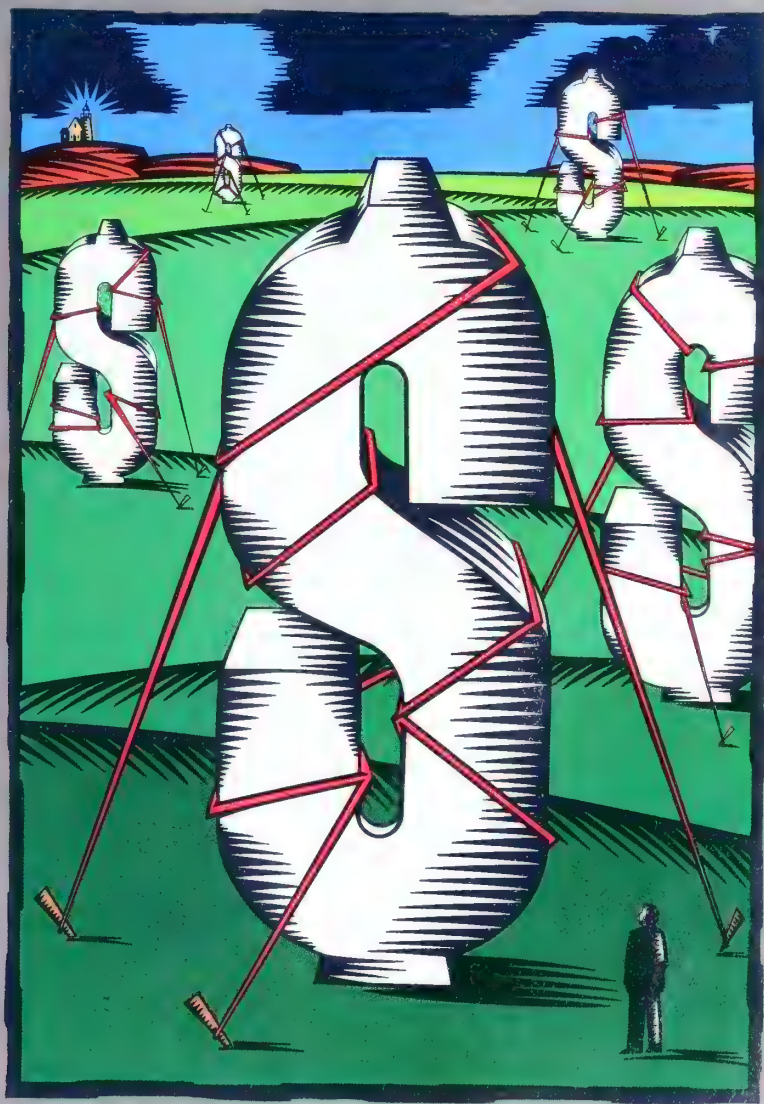
■ **Item:** More than three-quarters of corporate health plans now require doctors to justify treatment decisions to "utilization review" officers, who often have no advanced medical training and whose "review" may consist of little more than filling out a computer-generated checklist. And in the hottest health care arrangement — health maintenance organizations — many patients obtain care only by sacrificing a lifelong relationship with their family physician.

■ **Item:** Because of the Federal Medicare program's unrealistically low reimbursement rates,

reports *The New York Times*, a growing number of doctors are reducing service for the elderly — or are refusing to see them altogether. "I really don't want to continue with Medicare patients," one physician says. ". . . If they want to come to me, they will have to sign a paper that says it won't go through Medicare."

■ **Item:** Hospital emergency rooms have become so overcrowded in the nation's big cities, notes *The Washington Post*,

Who can improve
your employee benefits
without increasing costs?



BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

that people at some institutions "spend days in gurneys waiting for admission or live in sleeping bags on the floor when chairs and

beds are filled." And not just emergency care is being crippled. Impoverished pregnant women in Chicago, Los Angeles, and elsewhere must wait for as long as 18 to 20 weeks for their first prenatal visit.

■ **Item:** Spying an election-year bonanza, politicians are stumbling all over themselves to announce their own "solutions" to the country's health care crisis. Leading the list: a "play or pay" scheme that would impose the equivalent of a head tax on each productively employed worker. The Oregon state legislature has gone even further, voting to explicitly ration health care for the poor.

Such is the state of American health care, circa 1992. Debilitating costs. Diminishing access. Increasingly depersonalized medical care. "Underground" medicine for Medicare patients. Endless waits for treatment. Government-imposed rationing.

One is left to wonder: Perhaps Mr. Nourse's dark musings weren't fantasies after all.

Business' Failing Health

If scenes and statistics like these aren't enough to send chills down the spine of Corporate America, the unfolding politics of health care reform should be. Already, businesses spend an average of \$4,081 per employee on family health benefits, The Wyatt Co., a benefits consulting firm, calculates, and that amount is expected to climb to more than \$14,300 by the year 2000. But to the Capital's most impassioned advocates of health care reform, that isn't good enough.

Their aim: to get business to pick up the tab for insuring the 37 million uninsured. The popular "play or pay" mandates, for instance, would raise the corporate health bill by as much as \$44 billion per year. Full-scale national health insurance could cost several times as much.

In an economy in which health care expenses already impose an effective tax of up to \$3 an hour on U.S. labor, such policy innovations would do wonders for American competitiveness. "Running those costs through business is one of the dumbest things we can do if we want to be internationally competitive," Richard E. Heckert, then-chairman of the National

Association of Manufacturers, complained in 1989.

And with good reason. Labor costs in the United States rose two and one-half times faster than those in Japan and West Germany during the 1980s, a development driven largely by a 400% increase in the cost of health benefits. But if reform-minded politicians have their way, that's only the tip of the health care

iceberg. Senator Bob Packwood (R-Ore.), former chairman of the Senate Finance Committee, expects that the battle of the 1990s will be between "play or pay" mandates and national health insurance. Within three years, he predicts, one or the other will be enacted.

If Senator Packwood is right, corporate printshops had better start shoring up their budgets. They're going to need a lot of red ink.

Political Malpractice

Calling the politically popular health care solutions into question is not to argue for inaction, however. As White House budget director Richard G. Darman accurately points out, the current health care system is "not financially sustainable" over the long term.

Few would disagree. Indeed, so much has been written about America's health care crisis that additional warnings might seem superfluous. As RJR Nabisco chairman Louis V. Gerstner's "Noah Principle" succinctly advises in another context: "It's time to stop predicting rain; it's time to start building arks."

But the problem, as we will see, is that most of the current health care "arks" are full of holes. To put it bluntly, much of what has been put forward in recent months in the name of health care reform is superficial at best and misleading at worst. Diatribes masquerade as diagnoses, anecdotes as analysis, placebos as effective programs. It is the political equivalent of medical malpractice. We may be comforted by believing there are easy answers to our health care crisis. But there are not.

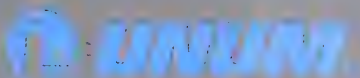
If we are to truly solve our health care problems, the most important thing we can do is to move beyond the simplicities and misconceptions of the current health care debate. The proponents of reform are no doubt sincere in their conviction that simple steps can rescue American health care from future horrors like those depicted in Alan Nourse's *Bladerunner*. Unfortunately, by ignoring the true nature of our health crisis, these sound-bite solutions only bring the day of the bladerunner closer at hand. ■



JOHN J. LABRECQUE

UNUM. That's who.

- ▶ UNUM. You enhance your benefits package with comprehensive employee-paid plans.
- ▶ UNUM. You receive superior service from a vast network of benefits specialists.
- ▶ UNUM. Meeting your benefit needs with disability plans, specialty employee benefits, retirement and long term care plans.



You can count on what we know.

UNUM Life Insurance Company of America, Portland, Maine 04122
(All states except New York)
First UNUM Life Insurance Company, Tarrytown, New York 10591
(New York state only)
© 1992 UNUM Corporation

1-800-634-8026

For better or worse, America's health care crisis has become a crisis of cost. In 1980, employed Americans paid an average of \$150 a year for health insurance; in 1991, they shelled out more than \$1,300 a year, or nearly 9 times as much. Nor has business been spared. Between 1970 and 1989, corporate spending on employee health insurance shot up by 163% after accounting for inflation, compared to an increase of only 1% in real wages and salaries.

What has been happening? Most analysts lay the blame squarely on the insurance mechanism itself. Insurance "takes away the incentives of providers to engage in price competition," insists University of Maryland economist Mancur Olson. The same principle applies to consumers. The freedom to choose health care providers and services at will, Mr. Olson asserts, "is the freedom to choose the most expensive of the available alternatives without having to pay extra for it."

As it turns out, people with health insurance *do* consume more health care than those without — as much as 60% more physician services and 3 times as many hospital services, according to data collected by the U.S. Census Bureau. And Rand Corp. researchers, in controlled studies in the 1970s, found that families with free medical care made 50% more physician visits and had one-third more hospital admissions than did families with high insurance co-payments.

Clearly, it's neither feasible nor desirable to eliminate health insurance. But there seems a straightforward way of countering insurance's adverse effects: Simply clamp down hard on excess health care demand, by imposing tough utiliza-

tion controls and carefully "managing" patient care, and on unwarranted price increases, by limiting the amount that doctors and hospitals can charge.

The problem is, that's exactly what we've been trying to do for the last three decades — with little success. Stanford University economist Victor Fuchs, a leading authority on health care finance, recently evaluated the cost-containment efforts undertaken through the end of the 1980s and came to this sobering conclusion. "Did cost containment reduce the rate of growth of health care expenditures?" he asked. "It did not, at least so far." Indeed, he discovered that real health costs per person grew faster *after* 1980 — when cost-control efforts intensified — than in the previous decade.

We are left with a troubling question: If the current menu of cost controls hasn't brought health costs to heel, what will?



THE COST OF GOOD HEALTH

The Failure of Cost Containment

Many business leaders have started asking themselves the same question. Indeed, throughout Corporate America, the once unblinking faith in the therapeutic power of medical cost containment is being replaced by anxious doubts — and spreading disenchantment. In a 1990 Wyatt Co. *Management USA* survey, most senior executives viewed none of the eight common cost-containment approaches as being "very effective" in controlling health costs. Worse, fewer than 1 in 5 saw the so-called "painless" cost-control initiatives — managed care, wellness programs, and the like — as having much promise.

It isn't a problem of business doing the wrong things, either. Even the most celebrated cost-control techniques just don't

seem to work. One of these, used by three-fourths of employers, is "utilization review" (UR), which requires patients to obtain approval from a third-party reviewer before undergoing many medical procedures. Despite widespread claims that UR can slice health costs by eliminating unnecessary care, the National Academy of Sciences' Institute of Medicine discovered in 1989 that the technique had not "altered the long-term rate of increase in health care costs." Similar requirements for second surgical opinions, other studies have shown, are equally ineffective.

Putting a Lid on Prices

The suspicion that health care providers charge more than competitive markets would allow led the Federal government in the early 1980s, to adopt a much more direct method of cost control: a fixed schedule of fees that limited how much Medicare would pay for inpatient

You've heard what the political candidates have to say about health care reform. Now perhaps you'd like to hear from America's doctors.

Health care reform is high on our nation's agenda.

In recent months, several health care bills have been put before Congress. Proposals range from mild reform to radical overhaul.

There's little question that the American people are asking for change.

Millions of full-time employees and their families are now living without health insurance because of its cost.

Those who have insurance often lose their coverage when they change jobs, simply because of a prior illness.

And Medicaid, the public health care program that was created to help the poor, currently excludes more than half of those desperately needing care.

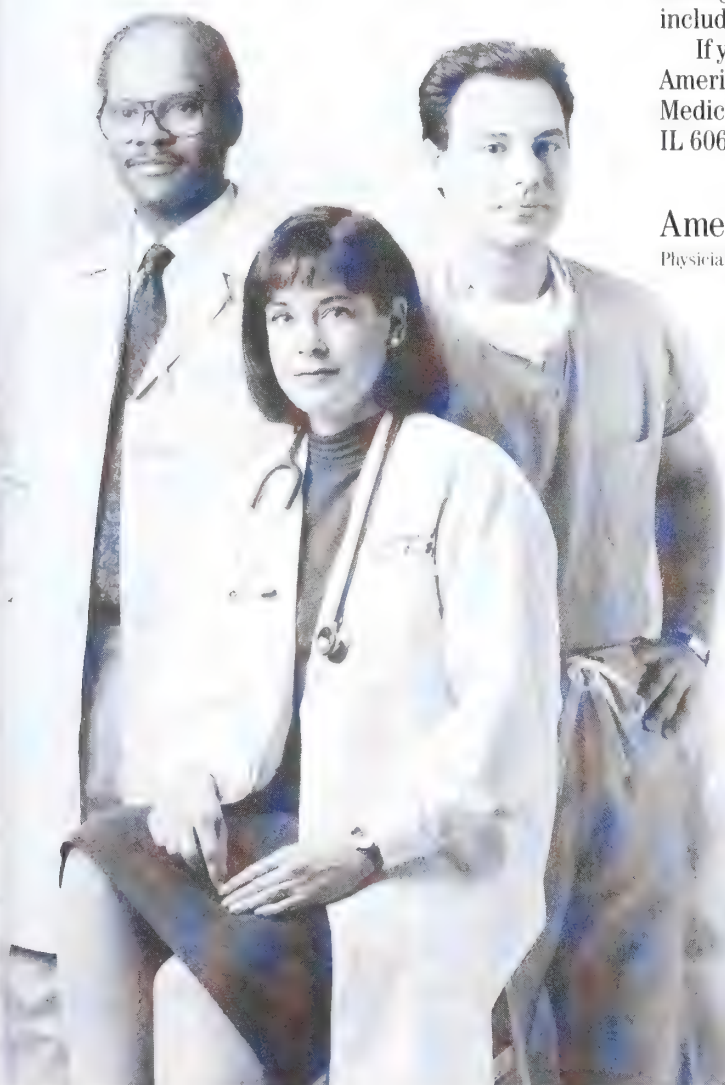
The 300,000 member physicians of the American Medical Association think this is wrong. We believe our system *must* be improved. And we have a proposal, called Health Access America, that will provide affordable health insurance to *all* Americans, while containing costs and preserving individual freedom of choice.

Most people in this country *do* receive high quality medical care. But 35 million Americans are falling through the cracks in the system. Shouldn't they be included, too?

If you would like to learn more about Health Access America, write Dr. Jim Todd, Dept. 403, American Medical Association, 515 North State Street, Chicago, IL 60610. Or call us today at **800 621-8335**.

American Medical Association

Physicians dedicated to the health of America



BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

hospital procedures.

Because the government can set reimbursements at whatever levels it wants, the prospective payment system (PPS),

as it is known, should have stopped rising Medicare costs cold.

It didn't. While the new payment system did slow the growth in inpatient expenditures in its first five years, total Medicare hospital spending in 1990 was still about two and one-half times the 1980 level. What savings did occur were mainly illusions, as PPS merely shuffled medical expenses from hospitalization coverage to other parts of the Federal budget. In the first two years of PPS, for instance, outpatient surgery increased by 104%, raising the total Medicare surgery rate to higher levels after PPS than before.

And Medicare's cost shifting nearly gutted Medicaid. While PPS did shorten hospital stays, those gains were largely offset by an increase in nursing home admissions, most of which are paid for by Medicaid. As a result, though designed as a program for the poor, Medicaid now must devote some 70% its budget to the care of elderly, blind, and disabled patients that Medicare has shunted aside.

The Limits of Managed Care

Businesses obviously cannot impose price controls on health care providers in the way the Federal government can. But HMOs and other "managed care" arrangements promise the next best thing: the chance to combine negotiated discounts in providers' fees with tough utilization controls and the coordination of patient care.

And make no mistake. Managed care has sharply cut health costs for many subscribers. Still, it remains far from a panacea for Corporate America's health crisis. As the Wyatt Co.'s *Management USA* survey showed, only 1 in 6 corporate executives have found managed care to be "very effective" in controlling health costs.

A key reason is that, while some firms are able to lower their health premiums by signing on with HMOs, PPOs, and the like, many others are not. A 1991 employer survey conducted by benefits consultant A. Foster Higgins & Co. discovered that, in 63% of responding firms, premium increases for HMO plans "equaled or exceeded those for indemnity plans." Overall, the survey indicated, premium hikes for managed care plans in 1991 averaged 12% — almost identical to the premium growth for non-managed, fee-for-service plans. And that's

not a one-time aberration, either. Over the period 1960-1981, premium costs for HMO enrollees grew at essentially the same rate as did those for fee-for-service plan members.

Nor are actual premium levels necessarily lower in managed care plans. While many HMOs and PPOs offer subscribers significant discounts, a 1990 employer survey by the Health Insurance Association of America revealed that the average family premium in conventional indemnity plans (between \$308 and \$319 a month, depending on plan type) was only slightly higher than in HMOs (averaging between \$311 and \$316 a month) and was actually lower than in PPOs (at \$322 a month).

A Plague of 'Unnecessary' Care

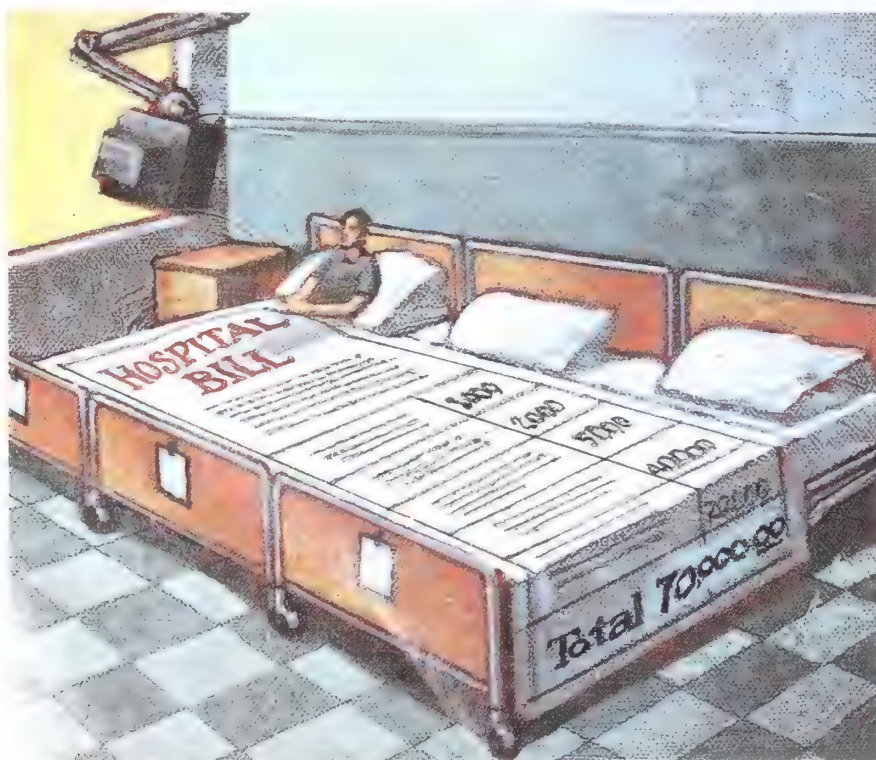
The foregoing might give the impression that controlling health costs is a difficult chore. But listen to most popular discussions of the subject, and it seems easy: Just get rid of unnecessary care. As one top newsweekly declared last fall, "the U.S. could save at least \$200 billion a year simply by curbing fraud and unnecessary practice. We know where the problems lie."

We certainly appear to. According to numerous studies, one-third of all medical procedures are "medically inappropriate." In addition, one-third of all Medicare spending takes place in the last year of life (and nearly 10% in the last 30 days), much of it for what health writer Victor Cohn calls "\$100,000 funerals" — useless treatments for people with virtually no chance of surviving.

Findings like these suggest that we could make deep cuts in the amount we spend on health without any harm to the quality of patient care. Yet one must wonder: If the U.S. health care system is filled with so much patently unnecessary medical treatment, why haven't 30 years of managed care and a decade of Medicare price controls been able to root it out?

The Art of Medicine

We haven't eliminated "unnecessary" medical care for a simple reason: The cost of dying is too high. It's one thing to sit in the comfort of a Congressional hearing room and declare that "profligate doctors" are doing too many operations,



DAFFERTY/ASA



After six weeks in the hospital, Tommy was cured of osteomyelitis.
But not without complications.

As any child psychologist will tell you, a long hospital stay can be traumatic for a child.

So instead of sending children with osteomyelitis to the hospital for six weeks, one managed care group found a better way.

Parents can be taught to administer the simple intravenous treatment at home, with periodic checks by a visiting nurse. Providing the same level of clinical care, while greatly reducing both the emotional and financial burden on the family.

It's just one example of how managed care is proving

to be the most promising direction in our health care system. And why The Prudential is actively trying to expand the use of managed care throughout the country.

Because we don't think anyone's view of health care should be the one pictured here.

To find out more, write: New Approaches to Health Care, The Prudential, 751 Broad Street, 16th Fl., Newark, N.J. 07102-3777.

The Prudential 



it's another to look into the helpless eyes of a patient and tell her, "Sorry. You're over budget. Time to die."

In fact, says University of Pennsylvania health economist Mark V. Pauly, "We do not know, or even have a vague idea, whether unnecessary surgery, properly defined, is common or rare..." The reason, he says, is that it isn't practical to define "necessary" care except on a case-by-case basis — and even then it can be hard to tell. "Until you give me standard patients and standard diseases," remarks American Medical Assn. Executive Vice-President James S. Todd, "I can't give you standard treatments."

Yet that's just what the research on unnecessary care assumes. Virtually every such study relies on an expert panel's after-the-fact application of uniform practice criteria to patients' medical charts — typically without any first-hand knowledge of the patients being treated, their medical history, or their health care preferences. Trying to assess the appropriateness of treatment in this way is a little like trying to judge physical beauty from a personals ad.

And even under these circumstances, the "experts" disagree. In one Arizona study, two local physicians reviewed the decisions of the hospital's utilization review board. The physicians deemed "unnecessary" 28% of the hospital admissions the UR board had actually allowed, and "necessary" 39% of the admissions the board had denied. In another nationwide survey, local UR boards differed by a factor of 10 in the thresholds used for determining when cataract surgery was needed.

Too Old For Health Care?

And yet, one wonders, aren't there some people for whom expensive medical care is *obviously* inappropriate? In any given year, Medicare spends 6 times as much on elderly patients who die as on those who survive. Can't we draw the line somewhere?

We could if we knew where to draw it. Unfortunately, doctors generally don't know in advance which treatments will be helpful and which won't be. A 1987 report by the Congressional Office of

Technology Assessment concludes: "It is never clear that a 'life-sustaining' technology will sustain the life of a particular patient or, if it does, for how long."

Research by Anne A. Scitovsky of the Palo Alto (Calif.) Medical Foundation confirms this finding. Among Medicare patients who require the costliest medical treatments, exactly half live and half die. In fact, the cases in which medical expenses are greatest are the ones in which patients are expected to live but die, or are expected to die but survive.

The truth of the matter is that "unnecessary" medical care, for the elderly or patients of any age, is easy to define in a research paper — and almost impossible to identify on the operating table. Hence, trying to eliminate it with once-size-fits-all utilization rules is like trying to swat flies with a sledgehammer. There is simply no practicable way to save the money spent on unnecessary medical care for patients "destined to die," says Case Western Reserve University health professor Robert Binstock, "without also deliberately cutting off successful treatment for an equal number of likely survivors."

A Question of Access

Dr. Karen Davis, chair of the Department of Health Policy at Johns Hopkins University, is one of the nation's leading observers of government health policy. A top health official in the Carter Administration, she looks at the U.S. health care system with a calm and experienced eye. What she sees is all the more chilling because of it.

The strategies now being used to contain health costs "all have the potential to reduce the quality of care provided to patients," she says. "Most of these initiatives have been imposed on a health care system with considerable inefficiency and slack... It is difficult to be sanguine, however, about the potential for future savings to come without any loss in quality of care."

That future, it appears, is already on the way. In HMOs, for instance, most

studies show that the quality of health care parallels that in fee-for-service plans, even though HMOs shave hospital use among subscribers by as much as 40%. But University of California health economist Harold S. Luft has found that these cutbacks tend to be indiscriminate, with HMOs eliminating "necessary" hospital admissions about as often as they do "unnecessary" ones.

Even more serious problems infect the Medicare system. A 1988 report by the U.S. Department of Health and Human Services inspector general estimated that 540,000 Medicare patients each year receive poor quality hospital care in large part because of Medicare's price controls.

Elderly patients are also being discharged "quicker and sicker," with 50% more of the elderly now being sent home before their condition has stabilized. The price tag for these "cost efficiencies," according to the House Government Operations Committee: 3,269 avoidable deaths.

The Medicaid Disaster

These tragedies-in-the-making do not begin to compare, however, with one that's already here: the Medicaid program. The truth can be told: Medicaid has been an unmitigated disaster for the people it was most intended to help. To begin with, most of the poor can't even qualify for aid. Fully 76% of poor Americans were eligible for Medicaid at its inception in 1965; now only half the many — 38% — are. But don't blame the Reagan Administration's budget cuts. Medicaid covered just 40% of the poor *before* Mr. Reagan took office.

Those poor families who do qualify aren't much better off. Listen to this description from *The Washington Post* of New York City's "Medicaid mills": "Lines begin at sunrise... Patients arrive by the dozen, limping and wheezing, many clutching Medicaid cards. Some... will stand for hours, fevered and coughing... Others nap on crumpled pads of cardboard, or fashion makeshift chairs from the seats of abandoned cars... [Doctors] grind routinely through

Real health costs
per person grew faster
after 1980 —
when cost-control
efforts intensified. . .

the future of our health care system lies in a managed care approach, and that such an

The Prudential

Congress to . . .
The best way to reform national health care would be managed competition, a combination of private and public managed care plans that would guarantee coverage for everyone.

The New York Times*

There's nothing more reassuring than a second opinion.

America's health care system suffers from an inability to provide quality care at a cost everyone can afford. But we believe it can be cured. And, as you can see, we're not alone. For more information on Prudential's view of managed care and a reprint of The New York Times editorial, write: New Approaches to Health Care, The Prudential, 751 Broad St. 16th Fl. Newark, NJ 07102.



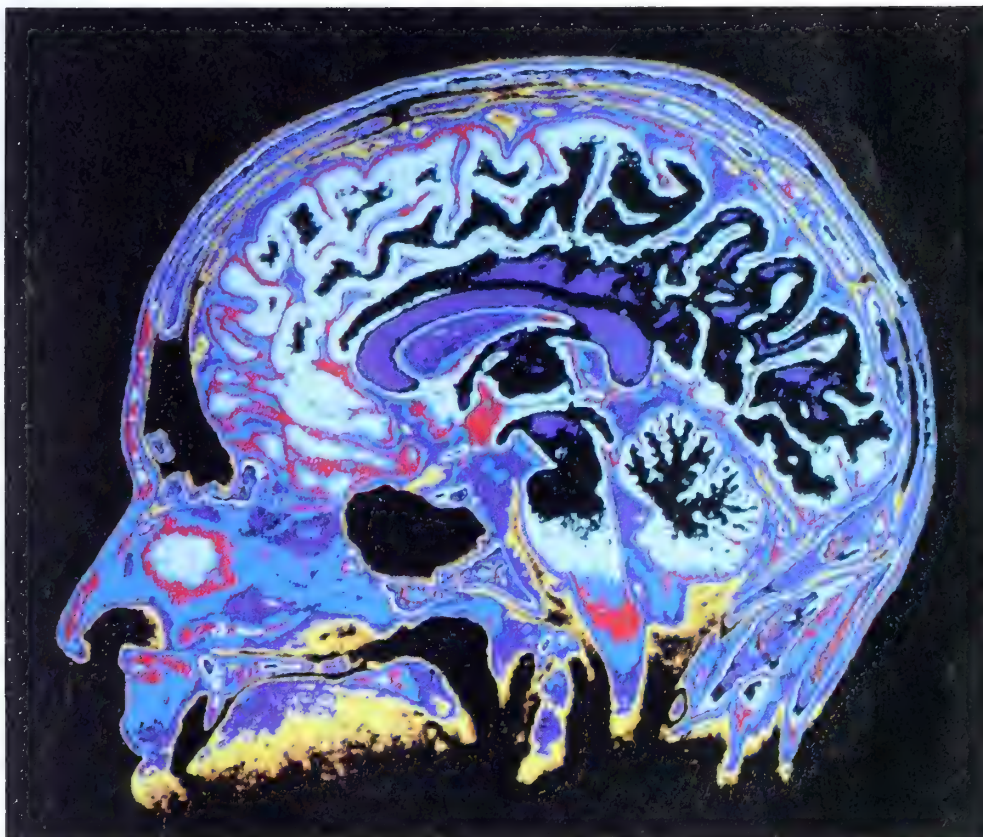
SIEMENS

1895. That was then.



Working in a small laboratory, Wilhelm Roentgen made the world's first x-ray images. Working with him, Siemens patented and manufactured its first x-ray tubes in 1896.

1992. This is now.



This modern magnetic resonance image lets doctors see into the human body more clearly than ever before. It is a product of years of Siemens investment in research and development. Happily, you don't have to be a scientist to appreciate the results. Doctors, hospitals and clinics throughout America are giving their patients better care because of Siemens advances in many forms of diagnostic imaging, including ultrasound, magnetic resonance, nuclear imaging and computed tomography. And that's the kind of result we can all feel good about. **Siemens. Precision Thinking.**

For more information, write for *Siemens '92* Box 8003M, Trenton, New Jersey 08650

Automation Automotive Electronics Electronic Components Energy Information Systems
Lighting Systems Medical Systems Power Generation Telecommunications Transportation



dozens of patients in a single hour. Often, exams consist of nothing more than taking a person's name, temperature and Medicaid information."

This is medicine?

For the nation's poor, it is. The *Post* report indicates that, regardless of the illness, doctors rarely see Medicaid patients for more than a minute or two, just long enough to draw a vial of blood. Pressed for time, most Medicaid doctors ignore simple preventive measures like pap smears and vaccinations altogether. And the physicians themselves are frightfully unqualified. One survey by the Community Service Society of New York found that only 6 of 248 doctors in poor neighborhoods met minimal standards for decent medical care.

This assembly-line medicine has helped to produce a spreading epidemic of health problems among the poor. Many largely preventable or controllable conditions, such as cerebrovascular disease, diabetes, chronic liver disease, AIDS, and low birthweight are from 2 to 8 times more common in low-income areas than in middle-income neighborhoods. Indeed, pregnant Medicaid beneficiaries are now *more* likely than women without insurance to give birth to babies with serious health problems.

Cost Control and the Poor

The Medicaid disaster, like all social problems, stems from a variety of causes. But one stands out above all others: cost-control measures unrelated to the value of medical services supplied.

The most destructive of these arbitrary cost controls are Medicaid's pathetically low reimbursement rates. Overall, a Health Insurance Association of America survey indicates, Medicaid reimburses doctors an average of just 55% of what private insurance pays for the same services. In some cases, Medicaid's fees are considerably lower: 48% of the going rate for an intermediate office visit, 37% for tonsillectomies, 29% for coronary bypass operations,

and a minuscule 15% of the going rate for obstetrical services, including delivery.

These low reimbursement rates have turned Medicaid into the new scarlet letter. Medicaid patients might as well enter private physicians' offices with a big red "M" stamped across their forehead. Most doctors, and particularly the most well-qualified doctors, simply can't afford to treat them — and don't. The number of obstetricians willing to care for pregnant poor women, for instance, has been declining steadily for the past 15 years. In Alabama, before a rare increase in payments, one-third of the state's counties offered no obstetrical care for poor women at all.

Hospitals, too, have suffered under the fee squeeze. Nationwide, only five states reimburse hospitals enough to cover the cost of caring for Medicaid patients. The result: Most major urban hospitals are running large deficits, threatening many poor families' last lifeline to health care. In Los Angeles alone, 40 hospitals serving mainly impoverished neighborhoods have closed down or merged in the last decade.

Will Medicare Be Next?

For all this, Medicaid's scorched-earth reimbursement policies have done nothing to contain the program's expenses. Medicaid is now the single fastest growing spending program in the country, and costs some 69 times what it did when it was inaugurated.

The only thing that has saved the Medicare system — the elderly's lifeline to care — from this same fate has been its ability to shift much of its costs onto other payers, including Medicaid.



Even so, Medicare beneficiaries are also threatened with diminishing access to care. The rate of hospital closures, for example, jumped 200% with the advent of Medicare's price control regime; in just the past three years, the proportion of doctors refusing to take on new Medicare patients has doubled.

And this is just the beginning. Determined to clamp down on doctors' fees, the Federal government this March implemented a new physician fee schedule called the "Resource Based Relative Value System." The new system sharply cuts reimbursements for most physicians who treat Medicare patients — in some cases to rates even lower than what Medicaid pays.

Business and Health Insurance

The experience with cost control in Medicaid and Medicare lays bare the "dirty little secret" of American health policy: The declining access to health care among the poor and the elderly is a direct result of our sledgehammer attempts at cost containment. The harder we've beaten down on costs, the more people we've cut off from decent medical care.

What's not so obvious is that a similar phenomenon has been taking place in the rest of the American health care system. The vast majority of the uninsured, statistics show, live in a family in which someone is employed, usually full-time. These uninsured workers are heavily concentrated in companies of

Cost-control
strategies all have
the potential to
reduce the quality
of patient care.

two types: small businesses and firms that employ a large number of low-wage workers. Calculations by the Rand Corp.'s Stephen H. Long indicate, for instance, that 95% of firms with more than 250 employees offer health insurance, but that barely 40% of those with fewer than 10 workers do so.

The main reason these firms don't provide insurance is that the cost per worker of administering and paying for a health plan is too great — often, more than the value of what the employees produce. But keeping labor costs in check has had a disastrous side effect: cutting off millions of employees from affordable health coverage.

The Costs to Come

Most of these problems, mind you, are occurring today. The future looks worse. Here's why:

Expanding coverage. The Pepper Commission, a blue-ribbon government advisory group, estimated in 1990 that providing health insurance for all Americans and nursing home care for today's elderly would add \$50 billion a year to the nation's health care bill. **New medical technologies.** The unprecedented medical advances of recent years have improved and extended the lives of millions of Americans — and that trend is certain to accelerate in the future. But most new medical technologies are likely to send health expenditures in only one direction: up.

The aging of America. America's over-65 population is growing as fast as the non-elderly population, and their numbers are expected to double by the year 2030. And here's a punch line: People over age 75 use health care 10 times as many health care services each year as do 20- to 50-year-olds. Overall, the total cost of health care for the elderly is expected to triple by 2040.

Facing medical cost increases like these, it's hard not to be chastened by economics writer Robert J. Samuelson when he observes: "Our entire health system is a monster. The good care it provides most people increasingly renders society as a whole. [And] things will get worse. It's not clear," he says, "when, how or if they will get better."

The Placebos of Dr. Politics

There's an old saw about the conventional wisdom: The more conventional an idea becomes, the less wisdom it seems to contain. Thus, it's with no little concern that one reads in *The New York Times* the pronouncement of a new "Health Care Standard" for America. When "choosing among proposals to reform the national health care system," Michael M. Weinstein writes in *The Times'* Editorial Notebook, "there's good reason to look for the reassurance of this label: Jackson Hole-compatible."

The Jackson Hole plan takes its name from the town in Wyoming where a group of health care intellectuals and practitioners, led by Professor Alain Enthoven of Stanford University, have been meeting for a quarter century to design a more cost-conscious health system. Their answer, in Mr. Weinstein's glowing terms, is "the shrewd plan known as managed competition."

Under managed competition, sophisticated organizations called "sponsors" would serve as health insurance purchasing agents, negotiating with providers and packaging health plans for individuals and firms to choose among. Large employers, presumably, would act as sponsors for their own employees, while smaller firms would be required to sign up with a central buyer or else lose their tax deductions for buying health insurance. Tax laws would be further reconfigured to encourage purchasers, as Mr. Weinstein puts it, "to choose low-cost managed care plans, like health maintenance organizations, over high-cost fee-for-service plans."

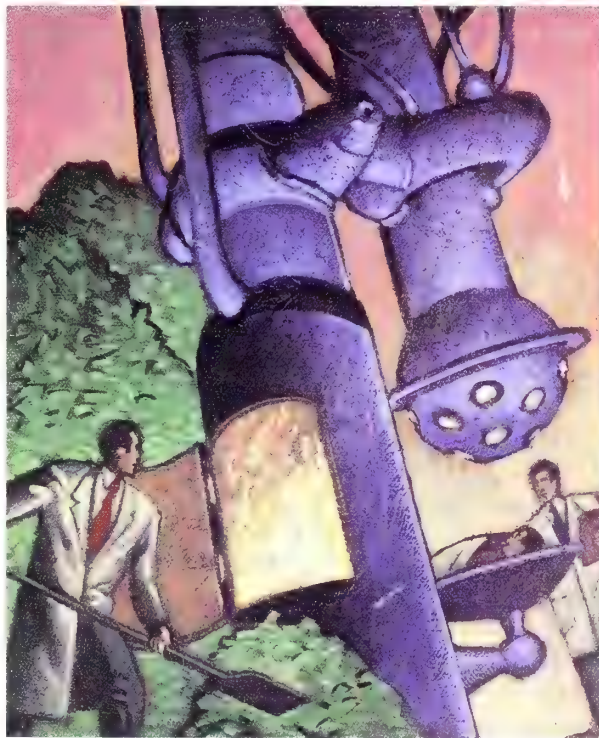
Managing the Competition

By managing the competition among health plans in this way, it is argued, cost-conscious sponsors would put an end to the upward spiral in health premiums. But

a moment's reflection suggests there's less magic to managed competition than meets the eye.

Managed competition's advocates, for instance, envision large employers being transformed into bargain-basement insurance shoppers at the drop of the word "sponsor." *But that's what they already are.* As the Rand Corp. data indicate, some 95% of large employers already provide health insurance to their employees. Since every one of these firms has to make a profit, you can bet they also look for the best health insurance bargain they can find.

And, increasingly, such employers have been turning away from the competitive, multiple option model. Managed competition co-founder Richard Kronick admits that, since 1987, the growth in the number of employees being offered an HMO plan has stalled. Even employers that do offer competitive health plans typically don't manage the competition among plans very well. "The failings of employers as sponsors are made evident by [considering] actual employer practices . . .," concedes Mr. Kronick. Included in his indictment: Failures to systematically monitor health plan performance; to survey employees as to their satisfaction with health plans;



DARRYL LUCAS

AN EPIDEMIC OF COST SHIFTING

Politicians are demanding that business pay more to insure the uninsured. What most don't realize is that business is already saddled with these costs — and the bill just keeps going up.

The culprit: a process called "cost shifting." It works like this. The hospitals and physicians that treat a health plan's subscribers care for other patients as well — members of HMOs and PPOs, Medicare and Medicaid recipients, and the uninsured. However, most of these other patients pay less than the full cost of treatment — often substantially less.

Calculations by the Denver, Colo. economic research firm Browne, Bortz & Coddington (BBC) reveal that HMOs and PPOs paid an average of only 93% of the full cost of care in 1990, while Medicare covered just 87% and Medicaid a mere 46%. Uninsured patients paid for only 25% of the medical services they consumed.

Making Up the Difference

Plainly, someone has to make up the difference, and that "someone" is usually the traditional indemnity plan:

- A study by the Colorado Hospital Assn. discovered that the typical private patient's hospital bill in the state is some \$2,300 (or almost 50%) higher than it would be without cost shifting.
- In 1990, a coronary bypass operation cost Stanford University Medical Center around \$40,000. But because Medicare paid only \$27,000 for the procedure and Medicaid just \$11,000, the center had to charge privately insured patients \$81,000, or twice the actual cost.
- White Memorial Hospital in Los Angeles loses \$2,000 for every Medicare patient it treats for diabetes. To make up for these losses, it must charge Blue Cross diabetes patients nearly \$6,400 for medical care that costs less than \$4,000 to deliver.

All told, hospitals in the early 1980s added an average of 10% to privately insured patients' bills to cover the cost of undercompensated care; by the early 1990s, BBC calculates this add-on was approaching 70%. Indeed, Hewitt Associates, a benefits consulting firm, estimates that cost shifting is responsible for nearly half of the recent rise in employers' inflation-adjusted health insurance premiums. ■

CALAN[®] SR (verapamil HCl) BRIEF SUMMARY

180 mg 240 mg

Contraindications: Severe LV dysfunction (see *Warnings*); hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock; sick sinus syndrome (if no pacemaker is present); 2nd- or 3rd-degree AV block (if no pacemaker is present); atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes); hypersensitivity to verapamil.

Warnings: **Heart failure:** Verapamil has a negative inotropic effect. In clinical experience with 4,954 patients, 87 (1.8%) developed congestive heart failure or pulmonary edema. Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker (see *Drug Interactions*). Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. (**Note interactions with digoxin under Precautions.**) **Hypotension:** Verapamil may occasionally produce hypotension. (**Elevated liver enzymes:** Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations have sometimes been transient and may disappear even in the face of continued verapamil treatment. Several cases of hepatocellular injury related to verapamil have been proven by rechallenge, half of these had clinical symptoms (malaise, fever, and/or right upper quadrant pain) in addition to elevation of SGOT, SGPT, and alkaline phosphatase. Periodic monitoring of liver function in patients on verapamil is prudent.) **Accessory bypass tract (Wolff-Parkinson-White or Lown-Ganong-Levine):** Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving 1 V verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients (see *Contraindications*). Treatment is usually DC-cardioversion. Cardioversion has been used safely and effectively after oral Calan. **Atrioventricular block:** The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st-degree AV block and transient bradycardia, sometimes accompanied by nodal escape rhythms. PR-interval prolongation is correlated with verapamil plasma concentrations, especially during the early titration phase of therapy. AV block may occur (2nd- and 3rd-degree 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. **Patients with hypertrophic cardiomyopathy (IHSS):** In 120 patients with hypertrophic cardiomyopathy (most of them refractory or intolerant to propranolol) who received therapy with verapamil at doses up to 720 mg/day, a variety of serious adverse effects were seen. Three patients died in pulmonary edema, all had severe left ventricular outflow obstruction and a past history of left ventricular dysfunction. Eight other patients had pulmonary edema and/or severe hypotension, abnormally high (> 20 mm Hg) pulmonary wedge pressure and a marked left ventricular outflow obstruction were present in most of these patients. Concomitant administration of quinidine (see *Drug Interactions*) preceded the severe hypotension in 3 of the 8 patients (2 of whom developed pulmonary edema). Sinus bradycardia occurred in 11% of the patients; 2nd-degree AV block in 4%, and sinus arrest in 2%.

Precautions: **Use in patients with impaired hepatic function:** Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage (see *Overdosage*). **Use in patients with attenuated (decreased) neuromuscular transmission:** Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. **Use in patients with impaired renal function:** About 70% of an administered dose of verapamil is excreted as metabolites in the urine. Verapamil is not removed by hemodialysis. Until further data are available, verapamil should be administered cautiously to patients with impaired renal function. These patients should be carefully monitored for abnormal prolongation of the PR interval or other signs of overdosage (see *Overdosage*). **Drug interactions:** Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility. The combination of sustained-release verapamil and beta-adrenergic blocking agents has not been studied. However, there have been reports of excessive bradycardia and AV block including complete heart block. For hypertensive patients, the risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Asymptomatic bradycardia (36 beats/min) with a wandering atrial pacemaker has been observed in a patient receiving concomitant timolol (a beta-adrenergic blocker) eyedrops and oral verapamil. A decrease in metoprolol clearance has been observed when verapamil and metoprolol were administered together. A similar effect has not been seen when verapamil and atenolol were given together. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin by 27% and 29%, respectively. The digoxin dose should be reduced when verapamil is given and the patient carefully monitored. Verapamil administered concomitantly with oral antihypertensive agents (eg, vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta-blockers) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. Concomitant use of agents that attenuate alpha-adrenergic function with verapamil may result in a reduction in blood pressure that is excessive in some patients. Such an effect was observed in one study following the concomitant administration of verapamil and prazosin. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility. AV conduction and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Verapamil has been given concomitantly with short- and long-acting nitrates without any undesirable drug interactions. The interaction between cimetidine and chronically administered verapamil has not been studied. Variable results on clearance have been obtained in acute studies of healthy volunteers; clearance of verapamil was either reduced or unchanged. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. This may produce carbamazepine side effects such as diplopia, headache, ataxia, or dizziness. Rifampin may markedly reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing) dosage reduction may be required. An 18-month toxicity study in rats, at a low multiple (6-16) of the maximum recommended human dose, and not the maximum tolerated dose, did not suggest a tumorigenic potential. There was no evidence of a carcinogenic potential of verapamil administered in the diet of rats for two years at doses of 10, 35, and 120 mg/kg/day or approximately 1, 3.5, and 12 times, respectively, the maximum recommended human daily dose (480 mg/day or 9.6 mg/kg/day). Studies in female rats at daily dietary doses up to 5.5 times (55 mg/kg/day) the maximum recommended human dose did not show impaired fertility. Effects on male fertility have not been determined. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy labor and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use. Safety and efficacy of Calan SR in children below the age of 18 years have not been established. In chronic animal toxicology studies verapamil caused fetal and/or suture line changes at 30 mg/kg/day or greater, and frank cataracts at 62.5 mg/kg/day or greater in the beagle dog but not in the rat. Development of cataracts due to verapamil has not been reported in man.

Adverse Reactions: See *Warnings* for discussion of heart failure, hypotension, elevated liver enzymes, AV block, and rapid ventricular response. Constipation (3.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF and pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia HR < 50/min (1.4%), AV block total 1° 2° 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes (see *Warnings*). The following reactions reported in ≤ 1.0% of patients occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecostasia, increased urination, spotty menstruation, impotence. The frequency of cardiovascular adverse reactions that require therapy is rare; hence, experience with their treatment is limited. Whenever severe hypotension or complete AV block occurs following oral administration of verapamil, the appropriate emergency measures should be applied immediately, eg, intravenously administered norepinephrine bitartrate, atropine sulfate, isoproterenol HCl (all in the usual doses), or calcium gluconate (10% solution). In patients with hypertrophic cardiomyopathy (IHSS), alpha-adrenergic agents (phenylephrine HCl, metaraminol bitartrate, or methoxamine HCl) should be used to maintain blood pressure, and isoproterenol and norepinephrine should be avoided. If further support is necessary, dopamine HCl or dobutamine HCl may be administered. Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

Overdosage: Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel and have been used effectively in treatment of deliberate overdosage with verapamil. Verapamil cannot be removed by hemodialysis. Clinically significant hypotensive reactions or fixed high-degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures, including cardiopulmonary resuscitation.



If your doctor has prescribed Calan[®] SR (verapamil HCl) 180 mg or 240 mg for your high blood pressure...

**You'll get your
money's worth
—or your
money back.**

The most expensive medicine is one that doesn't help you as it should. A drug that works for one person may be less effective for another. That's why we created the Searle PATIENT PROMISE[®].

The PATIENT PROMISE means that if your doctor has prescribed Searle's Calan SR, it must achieve the expected therapeutic benefit or we'll refund every cent you paid for your last prescription. No ifs, ands, or small print.

Your doctor should already have complete information about this program.

SEARLE

Leading the way with
new ideas in healthcare

Please see next page or adjacent page
for a brief summary of prescribing information.

BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

to routinely publicize information on health care quality; and to adjust the employer's contribution to avoid penalizing health plans that serve sicker enrollees.

That's quite a tally of sins. Yet there's no reason to believe that a managed competition regime that continued to rely on large employers as sponsors would change any of it.

Nor could managed competition hope to transform the small employer insurance market. The threat to withhold tax breaks would be meaningless to the majority of small businesses that don't offer health insurance anyway. Even the cornerstone of the managed competition vision — the belief that increased enrollment in HMOs and other managed care plans would dramatically reduce medical care costs — is flawed. As the evidence presented earlier shows, after 30 years, this hasn't happened.

"Play or Pay" — and Pray

For all its shortcomings, managed competition at least has the virtue of adhering to the physician's oath: "Do no harm." Unfortunately, the same cannot be said of the other leading health care reforms, whose main effect would be to bring to all Americans the kind of Potemkin medical care that Medicaid now delivers to the poor.

The most seductive of these reforms is the so-called "play or pay" scheme, which might be better termed "play or

pay — and pray." Viewed by most observers as the likeliest of the major health care reforms to be enacted, "play or pay" mandates would impose on all employers this choice: "play" (by offering a minimum health plan to their employees) or "pay" a tax of between 7% and 9% of payroll to enroll the firms' employees in a government-sponsored health plan, usually an expanded form of Medicaid.

Start with "play or pay's" strongest point: It would guarantee affordable health coverage to all Americans, right? Hardly. Because "play or pay" plans are employer-based, they automatically leave out the unemployed and self-employed, as well as part-time workers, thus omitting key blocs of the uninsured. Many plans also exempt at least some small businesses. We are left with a very small proportion of the uninsured — no more than half, according to the U.S. Congressional Budget Office — who actually would gain insurance under "play or pay."

But the real defect in the "play or pay" scheme is that the vast majority of the newly insured would not be covered by their employers under the employer mandate, as proponents imply, but by the new government-run program. A study by the Urban Institute, a private research group, estimates that between 7 and 12 million of the currently uninsured would gain coverage at work because of "play or pay." But between 45 and 66 million Americans now insured either through private or employer-based plans would be pushed into the government plan because of "non-playing" employers.

And so let us get away from the notion that "play or pay" mandates are a creative way of building upon America's successful private

insurance system. They are nothing of the sort. They are a tax on business to finance a new, public health insurance plan, pure and simple, and they must be judged on that basis.

In so doing, the first witness must be Medicaid itself — the nation's only broadly based public health plan — and its testimony, as we have seen, is devastating. As of 1990, Medicaid insured fewer than 15 million Americans, and even so was plagued by skyrocketing costs, declining access, and tragically poor quality care. Do we really believe

that a new Medicaid-like system, 4 or 5 times as large, would be *better*?

Yet the likely effects of "play or pay" extend beyond the damage it would do to our current health care system. The Urban Institute calculates that the mandates would raise Corporate America's health insurance costs in the first year alone by up to \$44 billion. Health

costs for covered small businesses could jump by as much as 100%.

But it is workers who would suffer the most. John F. Cogan, a labor economist at the Hoover Institution in Palo Alto, Calif., predicts that the new mandates would destroy between 500,000 and 1.5 million jobs, with those of low-income workers — ironically those most likely to need health insurance — at greatest risk. And even employees not handed pink slips would feel the pinch: Experience with the workers' compensation program indicates that as much as 86% of the new health tax ultimately would be borne by workers themselves through cuts in wages and benefits.

Miracle of the North

The last great fascination of American health care reformers is the Miracle of the North — Canada's national health care system. Even though Britain's beleaguered National Health Service has long fallen out of favor as a model of enlightened health care delivery, Canada's more modern system retains an almost unblemished mystique.

The truth of the matter, however, is much different. The Canadian health

The Canadian health

care system is

struggling with the

same problems that

have frustrated U.S.

health care planners.



JOHN LABBE

are system is struggling with the same problems that have frustrated U.S. health planners. Canada has simply done a better job of sweeping the hard cases — and the real costs of delivering health care — under the rug of statistical obfuscation.

Consider the dollar cost of health care. Simple budget data indicate that Canada spent only 8.7% of its GNP on health care in 1987, compared to 11.0% in the United States. Indeed, the U.S. General Accounting Office estimated in 1991 that the United States would save \$67 billion a year just by adopting Canada's single-payer system.

Compelling as they are, such figures are all fudge and fluff. There are a number of reasons why published health costs are lower in Canada — and none of them has anything to do with Canada's ostensibly superior delivery system. A 1991 study by Canadian health economists Jacques Krasny and Ian Ferrier documented some of these:

Canada's population is younger, and so Canadians' health needs are less.

Canada spends much less on health care research and development than the U.S. does, typically taking on new technologies only after other countries have borne the cost of developing them.

Capital costs like hospital construction are charged to the Canadian government's operations budget, and are not included in the cost of its health care system. Canada's health budgets also exclude the cost of raising the taxes needed to finance its health system, which can amount to 20% of revenues — well above the 12% administrative overhead of U.S. insurance firms.

When allowance is made for these factors, Messrs. Krasny and Ferrier find, the total costs of the Canadian health care system as a percent of GNP are almost identical. But because Canada's economy outperformed the U.S. economy for the last two decades, minimal health costs per capita actually grew *faster* in Canada than in the United States during this time.

Waiting in Line

Anyway costs aren't the sole problem with Canadian health care. As in the Medicare and Medicaid programs in the United States, Canada "controls"

health costs mainly by cutting back people's access to care.

Most notable among these cutbacks is Canadians' limited access to lifesaving medical technologies. Canada's global health care budgets place such heavy restrictions on purchases of medical equipment that Canadian hospitals, as one careful study notes, are "nearing obsolescence." Overall, Canadians have as little as one-eighth as much access as patients in the U.S. do to many key medical technologies.

These technology restrictions, in



turn, translate directly into reductions in essential medical care. During the last half of the 1980s, the number of open-heart procedures actually fell in Canada, despite the technique's proven ability to lengthen and improve patients' lives. Even now, elderly Canadians are as little as one-fourth as able as their U.S. counterparts to receive a coronary bypass operation. Children suffer, too: In early 1989, equipment shortages forced Toronto's Hospital for Sick Children to send home 40 children who needed heart surgery.

What these budget ceilings and technology restrictions don't deny to Canadian patients they usually delay. Only family practitioners seem to offer care on demand. As Darlene Long-Thompson, founder of a support group for Canadian children with heart disease, recently told the McNeill-Lehrer News Hour, Canada's is "a wonderful system if you've got a sore throat."

But not if you've got much else. Delays for such standard procedures as tonsillectomies, cataract removal, hysterectomies, hip replacements, and coronary bypass surgery average as

much as 4 to 12 months.

In Manitoba, it can take four years to obtain a knee or hip replacement. And don't think it's just "elective" procedures that get put on hold. Reports of delays of 14 months for clearing blocked arteries, 2 months for urgent pap smears, and 48 hours for emergency heart surgery are common.

People could die waiting for critical medical care like this — and they do. As one Canadian heart doctor explains, "The risk of dying on the waiting list for cardiac surgery is greater than the actual operative risk." In Essex County, Ontario, 15 people died in a single year waiting for open-heart surgery.

Yet as tragic as they are, deaths are only the most visible sign of what former U.S. Surgeon General C. Everett Koop calls Canada's policy of "planned scarcity." These waiting lists condemn even the survivors — many of them elderly — to spend long months of their lives unable to walk or see or concentrate on anything but their faltering heartbeat when a standard operation could restore them to health immediately. Such delays, to use the favored phrase of critics of the U.S. health system, are as "cruel and unethical" as anything that takes place in U.S. health care.

Of course, some people in Canada *don't* wait. Vancouver physician Patrick J. Doyle writes that "only the very naive can believe that a politician, a physician, or a person with physician and hospital administration friends must line up for care . . . The rest of the population, the average-wage earner, the poor, and the elderly are treated equally. They do all the waiting."

But perhaps the best spokesperson for the virtues of Canadian medicine is Quebec Premier Robert Bourassa. As reported in *Maclean's*, Mr. Bourassa learned in August 1990 that he had a potentially fatal skin cancer. Did he thereupon dutifully join the queue for treatment in Canada's universal health care system? Did he take advantage of the technological promises of this medical Miracle of the North?

No, he chartered a plane and flew to the United States, where his cancer was promptly cured. ■

BUSINESS
 AND THE FUTURE OF
AMERICAN
HEALTH CARE

PART 3

To see where American health policy is headed, one need look no further than the State of Oregon. Led by state Senate President John Kitzhaber, Oregon is on the verge of adopting the first explicit health care rationing plan in the United States — and one of the first in the developed world.

Under the Oregon plan, scheduled to take effect in July if Federal officials approve, the state will add 120,000 poor people to its Medicaid rolls. But here's the catch: To contain costs, the new law will permit Medicaid to pay only for a basic list of 587 "high-benefit" procedures, like prenatal care and influenza treatments. Other, ostensibly "low-benefit" services — liver transplants for alcoholics and medicines for people with end-stage AIDS, for example — will no longer be funded.

Well-intentioned though it is, the Oregon plan contains some serious flaws. It imposes severe restrictions on medical care for the poor, for instance, while leaving untouched benefits for the elderly, who account for the bulk of state Medicaid spending. And whether care is at "low benefit" will be determined, not by doctors' judgments, but by a politically appointed state commission and the legislature's annual budget projections.

Still, Oregon's officials at least have come to grips with the unpleasant fact that genuine cost control doesn't come cheaply: To limit health costs, we must limit health care. And the future, it appears, holds more of the same. A 1990 Louis Harris and Associates survey found 56% of corporate CEOs, 61% of Federal legislators, 77% of top physicians, and fully 95% of major insurers



Medicaid, Canada's national health system, and Oregon's rationing plan. Health care administrators need only spin their particular choice of cost-control screws a little tighter, and they can clamp down on health costs as much as they might like.

AN EFFECTIVE HEALTH CARE SYSTEM

A Moral Health Care System

On the other hand, if we want a truly moral health care system — one in which decisions about the amount and type of care remain primarily with those whose health and lives are at stake — we must turn away from most of what passes for medical cost control today and adopt an entirely new principle of health care. One might call it "self-managed care." The principle would be: People choose the health care they want, and they pay for what they get — no less and no more.

Obviously, few people could "pay" outright for all the health care they might need, so health

insurance would remain a key part of any moral health system, including self-managed care. But through their choice of insurance plans, individuals

can specify ahead of time the level of medical care they desire. With self-managed care, the only proviso would be that they would pay extra for any additional care beyond a basic package of health services. Hence, under self-managed care, decisions as to the prospective "rationing" of medical care would rest with individuals themselves — not with employers, nor insurers, nor a government bent on blindly cutting health costs, the consequences for people's health notwithstanding.

can specify ahead of time the level of medical care they desire. With self-managed care, the only proviso would be that they would pay extra for any additional care beyond a basic package of health services.

Hence, under self-managed care, decisions as to the prospective "rationing" of medical care would rest with individuals themselves — not with employers, nor insurers, nor a government bent on blindly cutting health costs, the consequences for people's health notwithstanding.



**OPEN IN CASE YOU WANT
QUALITY CARE AND COST CONTROL
FROM ONE OF AMERICA'S LARGEST
HEALTH CARE NETWORKS.**

The Travelers' commitment to quality products and cost control starts with 33,000 employees dedicated to customer satisfaction.

Of these, 10,000 work exclusively in our Managed Care and Employee Benefits Operation.

That's the real Travelers difference.

But the numbers get even more impressive.

100,000 carefully selected and credentialed physicians and other health professionals and 1,000 hospitals in 130 major metropolitan areas.

\$1.4 billion in new business in 1991 — testimony to a company whose health care network delivers appropriate care more efficiently through local medical management. A company that customizes programs because it understands that not all businesses are the same. A company committed to avoiding illness — and expense — through wellness and counseling programs.

Two more numbers to be remembered. The Travelers is backed by over \$50 billion in assets and by a 128 year tradition of service.

This is Managed Care The Travelers Way.

TheTravelers
You're better off under the Umbrella.®

© 1992
The Travelers Insurance Company
and its Affiliates, Hartford, CT 06183.

Do you have diabetes? You might if...

- You've been overly tired lately for no apparent reason
- Someone in your family has a history of diabetes
- You are overweight and over 40
- You seem to be excessively thirsty
- You are urinating more frequently
- Bruises, cuts or infections take a longer than normal time to heal

Be aware of these subtle warning signs.

If more than a few seem familiar, you may have good reason to see your doctor. Only your doctor can diagnose diabetes. In many cases, if the disease is caught in its early stages, treatment need not be complicated or expensive. Sometimes a change in diet may be all that's necessary. But first, be sure. See your doctor.

For a poster-sized reprint of this message, write: Pharmaceuticals Group, Pfizer Inc, P.O. Box 3852D, Grand Central Station, New York, NY 10163.

A message
in the interest
of better
health from



Pharmaceuticals

A PARTNER IN HEALTHCARE™

The Seven Canons of Moral Health Care

It isn't possible here to spell out in full detail what a regime of self-managed care might look like. But at a minimum, such a system should:

1. **Guarantee all Americans access to the same basic health care benefits — no more "separate but equal."** If we really believe in equal access to health care, all Americans should have an

equal chance to purchase a basic package of benefits, regardless of where they live or work or how much they earn. The specifics of how such an idea might be implemented don't matter as much as the concept itself, but probably the most straightforward approach is the health insurance tax credit advocated by Stuart M. Butler and Edward F. Haislmaier of the Heritage Foundation.

Under the Heritage proposal, the current Federal income tax deduction for employer-provided health insurance could be converted into an equivalent tax credit for individual purchases of a basic health insurance plan. To ensure equitable coverage, only those health

plans that offered a prescribed minimum set of benefits would qualify for the credit. The law also would require each head of household to enroll all family members in a qualifying health plan; in exchange, the government would ensure that no family had to pay more than about 10% of their income for health insurance.

2. **Give low-income families financial help, not second-class medicine.** Even spending 10% of their incomes, many

poor families would not have enough money to buy a basic health plan. Messrs. Butler and Haislmaier therefore urge that their proposed health insurance tax credit be made refundable so that the government, in effect, would be paying the poor's health premiums.

Refundable tax credits would be expensive, of course, and so the Heritage

plan would reduce this tax loss by expanding poor people's access to Medicaid. A much better idea, though, would be to eliminate Medicaid entirely, and use the money saved to finance the credits. In fact, with a universal tax credit in place, there is simply no good reason to keep Medicaid — and many good reasons to scrap it. While

Medicaid's low reimbursement rates do hold down budget costs, the United States can no longer afford the *human* costs of consigning poor people to a system of second-class medicine.

3. **Stop making employers pay for their employees' health costs.** Currently, employers provide health insurance for the majority of working people and their families, a situation that suits most business and health leaders just fine. In the Wyatt Co.'s *Management USA* survey, for example, 70% of corporate CEOs, 74% of Federal legislators, and 95% of major insurers said that health insurance "should continue to be employment-based."

Sincere as they are, such opinions prove nothing so much as the law of inertia. For while the idea of employer-based health insurance once may have made sense, it does so no longer. Good health undoubtedly contributes to employee productivity, but these gains are now far more than offset by the cost of paying for health insurance. Employees suffer, too, when employers' choice of health plans is determined more by the need to cut costs than to promote good health — and that says nothing about the plight of employees who can't get health insurance of any kind on the job.

It's time to replace this flawed employer-based sponsorship system with a more universal sponsoring arrangement like the statewide Health Insurance Purchasing Corporations (HIPCs) advocated by Alain Enthoven and Richard Kronick as part of their "managed competition" initiative. But while Messrs. Enthoven and Kronick would use the HIPCs as a purchasing vehicle for *employers*, the HIPCs instead should become purchasing agents for *people*, who would choose the health plan that best met their own budgets and desires, not those of their employer.

4. **Make every insurance plan pay the real cost of health care — no more subsidies, cost-shifting, or risk exclusions.** American health insurance has become a shell game of catastrophic

Oregon's officials
have come to grips
with this fact:
To limit health
costs, we must limit
health care.



BUSINESS AND THE FUTURE OF AMERICAN HEALTH CARE

proportions. Governments "control" costs by shifting them onto other payers. Private insurance companies "control" costs by

excluding risky applicants. And, eventually, most of those left uninsured wind up receiving "free" care or Medicaid, driving up everyone's health costs.

This shell game must end. As long as Medicare remains, it should pay market rates to both hospitals and physicians, and should cover nursing home care as well as other medical expenses. Likewise, in order to qualify for the Federal tax credit, private insurers no longer should be permitted to exclude applicants because of pre-existing conditions or other demographic variables. States instead should establish risk pools to reimburse health plans that end up serving a disproportionate number of costly patients.

At the same time — in what is most critical to the concept of self-managed care — people should pay, through their insurance premiums, the real cost of the medical protection they desire. "Basic" health plans might include a core of key medical services, along with a few "cafeteria-like" choices of coverage for more expensive procedures. Young families, for instance, might opt for more intensive care for premature infants, while older people might choose coverage for heart transplants or kidney dialysis. To the extent they wished, people also could purchase supplemental coverage for heroic lifesaving measures or other super-expensive procedures.

Obviously, under this arrangement, wealthier people could buy more extensive health coverage than poor people could.

But that's no different than things are now — nor is it any different than in the supposedly egalitarian systems in Canada, where the wealthy escape medical equipment shortages by jetting to the U.S., or in Great Britain, where those with money pay to see private physicians. On the contrary, under self-

managed care, the American poor at least could begin to receive *real* medical treatment, rather than the ersatz care Medicaid now provides them.

5. Insist that people bear the costs of unhealthy behaviors. Today, few health plans adjust premiums according to individual behaviors that increase the risk of illness. At a time when increasingly stringent health care rationing is upon us, however, fairness demands that we first ask those who indulge in patently unhealthy behaviors to pay the true cost of their choices.

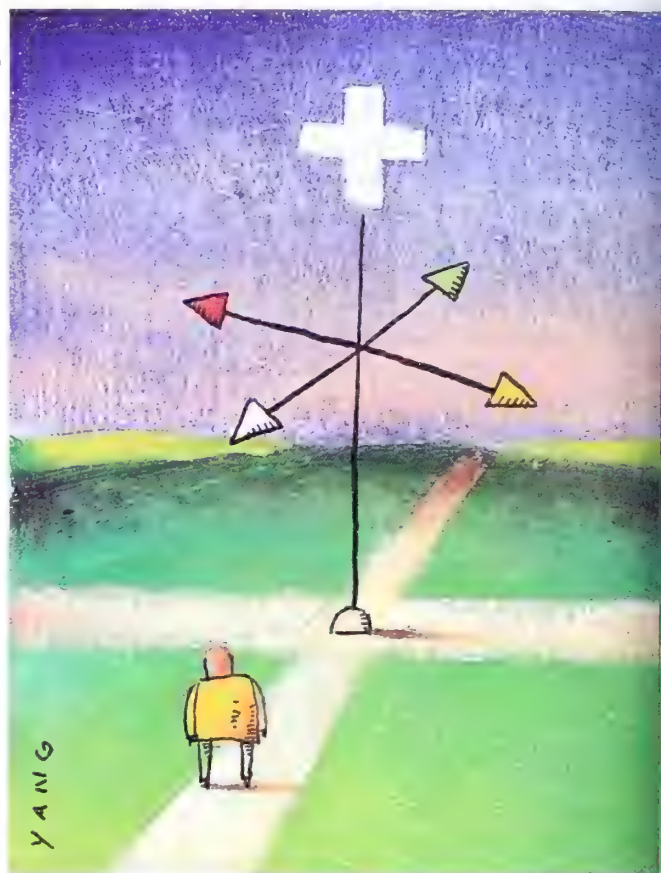
And those costs are enormous. Smoking adds \$65 billion a year to the nation's health bill; alcohol and drug abuse, another \$110 billion. In fact, one state insurance commissioner estimates that between 60% and 70% of all

health insurance claims stem from lifestyle-related illnesses.

This is especially true for infant health problems. Each week, some 5,000 low birthweight babies are born in the U.S., a result mainly of teenage child-bearing, smoking, poor diet, and alcohol and drug abuse. Keeping a single such infant alive can cost \$250,000 to \$1 million.

"Crack" babies alone can require months or years of intensive care at up to \$2,000 a day.

Things can't go on like this. The steps needed to tie health benefits more closely to health behaviors won't be easy ones, but we must start to take them if we want to continue providing high-



quality medical care at an affordable price. This means we must find ways to

- Make cost-effective preventive care, like vaccinations, pap smears, and prenatal care, free of charge, and require their use as a condition of receiving welfare benefits or other public assistance.

- Reserve heroic infant lifesaving procedures for the babies of mothers who complete a course of prenatal care.

- Raise insurance premiums and limit extraordinary medical procedures (like organ transplants) for smokers, alcohol abusers, and drug users to reflect the higher medical costs associated with these behaviors.

6. Solve the long-term care problem now — before it becomes insoluble. As noted, new lifesaving technologies and longer lifespans will continue to push up health costs for the elderly to the point that Medicare may not long survive without Terminator-strength rationing policies. To avert this catastrophe, families must begin preparing *now* for their own long-term health care needs.

The key to being prepared is long-term care insurance, a type of "medica-

People should
pay, through their
insurance premiums,
the real cost of
the medical protection
they desire.

Sharing your commitment to healthcare

Working with healthcare providers to set new standards of quality—Sanofi Winthrop and the Clinical Products and Health Sciences Divisions of Eastman Kodak Company

As an employer of over 130,000 people worldwide, Kodak appreciates the burden that today's medical costs mean to US corporations. That's why our products are not only effective but cost-effective, for quicker diagnoses and earlier—and often less expensive—treatment and cure.

Sanofi Winthrop produces prescription drugs, contrast media, and drug delivery systems designed both for efficacy and for improved safety, not only for patients but for hospital personnel as well.

Our Clinical Products Division makes clinical chemistry analyzers, immunodiagnostic products, and rapid test kits that provide fast, accurate results with service that's the best in the business.

The film and image management systems of our Health Sciences Division optimize the information in diagnostic images. A recent development, for example, enables one chest x-ray to do the work of two.

Together we are committed to affordable quality healthcare.





pension" paid for during one's working career that covers medical costs in the retirement years. To date, the Health Insurance

Association of America estimates, only 2 million such policies have been sold, most to people who wait to buy them until their 60s, when premiums can be prohibitively expensive for all but the wealthiest.

Yet long-term care policies purchased early in life cost but a few hundred dollars a year. A standard long-term care policy therefore should be made part of the basic health insurance plan that all Americans are required to buy. In keeping with the concept of self-managed care, people could choose a basic package of medical and nursing home care, or more extensive protection, such as coverage for organ transplants or long-term mechanical life support — but they would pay higher premiums for the more generous policies.

7. Deliver health care in the most cost-efficient manner possible. The current health care debate is dominated by proposals for making medical care-delivery more efficient. Many of these, like managed care, outcomes research, and medical malpractice reform, *can* help slow the growth of health costs — but only after the superstructure for self-managed care is in place.

Managed care, in particular, has yet to reach its full potential, which lies not so much in encouraging young families to join HMOs as it does in coordinating the care of potentially high-cost elderly patients. Working from this concept, for instance, the Hebrew Home for the Aged at Riverdale, N.Y., has created a community-based geriatric care program that minimizes health costs through careful monitoring of patients' needs, preventive steps like regular checkups and exercise, and social contact and support. It's a model that

deserves to be replicated nationwide.

Outcomes research — analyzing scientific studies to determine which medical techniques work best in which situations — also promises significant health care savings. But the best outcomes research is the kind that brings the patient directly into the decision-making process. A series of interactive videodiscs developed by Dartmouth College's Dr. John Wennberg that discuss with patients in clear, nontechnical language the benefits and risks of alternative procedures are the first wave of this patient-centered care. By providing the tools to make informed medical decisions, Dr. Wennberg believes the videodiscs will allow patients to become true participants in promoting cost-efficient care.

A Question of Choice

In their final encounter in Alan Nourse's novel *The Bladerunner*, Dr. John Long, the renegade surgeon, and Billy, the teenage bladerunner, face each other, for the first time, with a sense of hope. A deadly influenza epidemic, sweeping through the untreated millions, has overwhelmed the state-run medical system, and only by calling on the underground physicians has the government been able to bring it under control. "We may not need bladerunners too much anymore," Dr. Long tells the young courier after the government announces an end to rationing, "but we'll need plenty of well-trained, capable medics to help the doctors out."

Billy, for so long confined to the dark channels of bladerunning, greets this prospect with a rush of terror, knowing it means leaving a familiar life behind, even if for a better one beyond. But calm slowly settles in. He begins at last to see the future "not with panic but with eagerness and excitement. Because now, he knew, he really had a choice."

So it is with American health care, in these years before the bladerunner comes to call. We have grown so accustomed to the cancers of cost shifting

and arbitrary cutbacks in care that we walk without fear into the dark alleyways of rationing by waiting, rationing by exclusion, and rationing by government decree. We scorn those who "wastefully" try to prolong their lives or those of their loved ones, ignoring the philosopher's complaint, voiced here by George Washington University sociologist Amitai Etzioni: What is so ethically unacceptable about not wanting to be dead?

Fortunately, some farsighted health care analysts have started to wonder at what lies before us down these dark alleys. All of the conventional reforms, admits Jack A. Meyer, president of New Directions for Policy, a private consulting firm, look "good until you start talking about the specifics." Even Harris Wofford, the Pennsylvania Democrat whose surprise Senatorial win last November sparked the current health care debate, was persistently vague about how his national health plan would work.

Such vagueness is no accident; it is the nightcoat of government-enforced rationing, in all its many forms. For in the face of the otherwise inexorable growth in health costs, a national health system built around cost containment and government mandates can have but one end: a continual tightening of the cost-control screws, and the resulting, often devastating, denial of care.

If limits are to be placed on medical care — as they no doubt must be — the only ethical and moral way to do so is in the open streets of individual decision-making, in which people decide for themselves the type and intensity of care they wish to receive. And the only way to bring that situation about is through a regime of self-managed care.

It would be easier, of course, to settle for clichés or convention, or to do nothing and hope, somehow, to hold the bladerunner at bay. But those choices are no choice at all. Only with self-managed care can we control health costs with a spirit of compassion as well as common sense. Only then can we ensure that the people whose health and lives are on the line really do have a choice, after all. ■

Only with

self-managed care

can we control health

costs with a spirit

of compassion as well

as common sense.

We weren't always old and conservative. We used to be young and conservative.

Trendsetters, we're not. But the investment policy we've had for the past 147 years has apparently become all the rage of late. Being on the safe side is in. Buttoned down is cool.

How could our founders, seated around a table in 1845, have predicted the financial climate of the early 1990s?

The answer is simple. They knew that the future would hold bad times as well as good.

And that a life insurance company, by its very nature, had a responsibility to its customers to weather the storms.

So they laid down a conservative investment philosophy, one that we have adhered to ever since, through thick as well as thin.

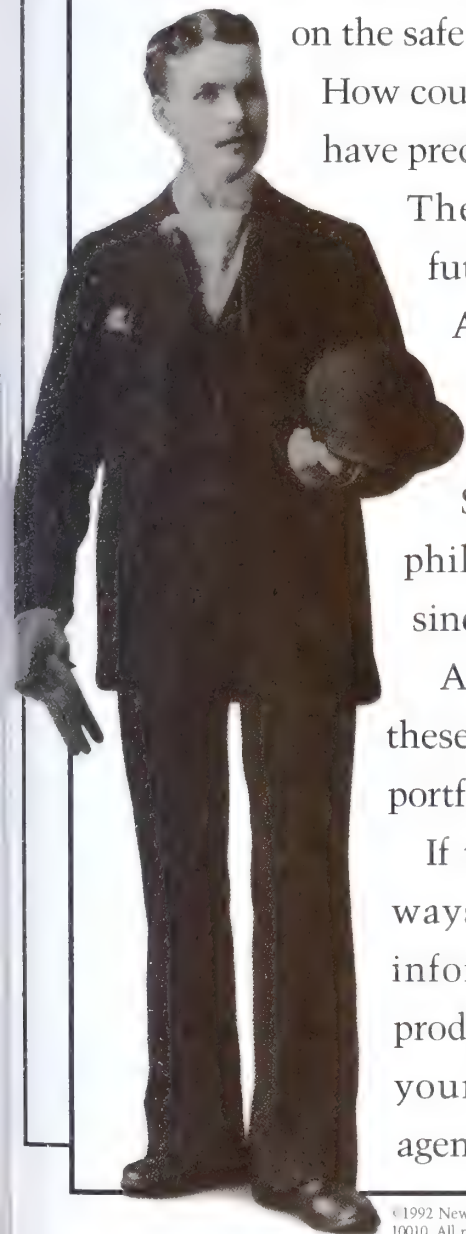
As a result, we're happy to report that even in these topsy-turvy times, 95% of the bonds in our portfolio are investment grade*.

If this is the price we pay for being set in our ways, we don't mind one little bit. For more information on any of our products and services, call your New York Life agent or 1-800-695-4331.



The Company You Keep.®

©1992 New York Life Insurance Company and New York Life Insurance and Annuity Corporation, 51 Madison Avenue, New York, N.Y. 10010. All rights reserved. *As of December 31, 1991; includes the bond portfolios of New York Life Insurance Company (NYLIC) and its subsidiary, New York Life Insurance and Annuity Corporation (NYLIAC), managed by New York Life Insurance Company. NYLIC has \$42.750 billion in assets and \$2.620 billion in surplus; NYLIAC has \$11.613 billion in assets and \$0.591 billion in surplus.



FOR EVERY YOU, THERE'S A FUJITSU.

Portable communication.

Whether you're

entertaining a prospect

or riding the range,

the ability to stay in

touch wherever you go

is an essential ingredient

of success. And no

pocket cellular

phone says success

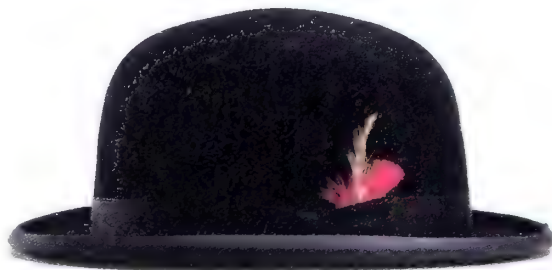
more clearly than the

Pocket Commander

Stylus™ from Fujitsu.

Accessories such as

the hands-free car kit



3-watt power booster,

cigarette lighter

adapter and Power

Pack Plus alkaline

battery pack, give

the Stylus practicality

to match its sleek

good looks. For the

portable phone

that keeps up with

you no matter what

hat you're wearing,

look to Fujitsu.

For every you,

there's a Fujitsu.

1 - 8 0 0 - 9 5 5 - 9 9 2 6

FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

Developments to Watch

EDITED BY FLEUR TEMPLETON

ANTE RETURNS TO THE INFERNO IN ANTARCTICA



This year, if all goes according to plan, two explorers will climb Mt. Erebus, an active volcano in Antarctica. One will descend into the crater to measure the temperature of the sizzling gases spewing from the lava lake. This information will help scientists understand the role of volcanoes in destroying the ozone layer.

This might well be a mission impossible—except that the explorers are robots deployed by Carnegie Mellon University with NASA backing. The endeavor will depend on teamwork between the two machines: a rawling transporter named Virgil will carry its companion, ite, to the summit, then act as a base station as the eight-legged rappeller descends into the crater. A laser scanner will let the machines “see” the terrain they’re passing through. If successful, the mission will help advance knowledge of cooperation between machines. The steel climbers will also give scientists a chance to test robotic technology in harsh environments, training for the kind of conditions they might actually encounter while exploring planets in space.

DATA-SALVAGE METHOD EN AN ARCHAEOLOGIST COULD LOVE

sooner or later, every computer's hard drive will suffer a fatal crash. It could be after 10 days or a decade, but in three years is a good bet. And the crash is sure to happen before you've made a backup of some important data. Rescuing vital information is the job of data-recovery specialists. But if the dying drive accidentally wrote over part of the data or if certain rare electrical malfunctions caused the crash, then some information is lost forever—until now. End's S&S International has developed an almost foolproof method of resurrecting the digital bits on dead disks. According to the Berkhamsted-based company, its proprietary data-analyzer (DSA) system is so sensitive that it can even recover information “buried” under newer data. To recover written-over data, the DSA system first maps the disk's magnetic signals. Next, it electronically subtracts the newer signals that represent the latest data. The faint signals that remain are computer-analyzed to reconstitute the original data. It isn't always 100% successful, and the job is “horribly expensive,” says S&S Chief Executive Alan Solomon—but for irreplaceable information, this technique may be the last hope.

LOCKING THE SECRETS BUILDING CUSTOM CRYSTALS

Crystals are a mysterious lot. Scientists have struggled for years to decipher how they form and how to control their properties. Now, chemists at England's University of Sussex have uncovered a key process that will enable crystals to be designed for specific uses. That includes making inexpensive

crystals that can convert the infrared signals transmitted over optical fibers into pulses of visible light suitable for processing by optical computers.

The discovery, says Kenneth Seddon, who heads the research, is that “we have shown how to harness hydrogen bonding to control [how] a crystal will grow.” Unexpectedly, it turns out the atomic bonds formed by hydrogen are the single biggest factor affecting crystal growth. These bonds govern roughly half the forces affecting crystal formation, he says.

Key patents have just been granted for the crystal-growing process, and Seddon promises full details shortly. Meanwhile, he offers some tantalizing hints. Besides use in optics, long-lived crystals could replace unstable compounds, such as certain food-processing chemicals or drugs.

A POTENT NEW CHIP IN CYRIX' SLINGSHOT

Cyrrix is again playing David to Intel's Goliath. The Richardson (Tex.) upstart has just unveiled a new line of micro-processor clones that seem certain to put the pinch on all but the fastest of Intel Corp.'s 486 chips. Moreover, Cyrix Corp. is aiming the new chips squarely at Intel's bread-and-butter desktop business, not just at laptops.

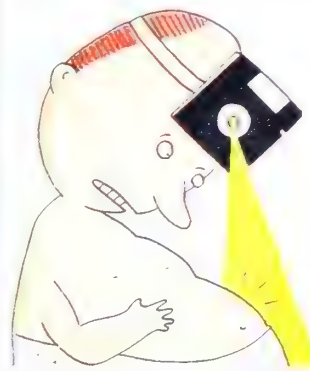
Cyrix first grabbed headlines in April with a quasi-486 design geared to laptops. That chip lacks special math-processing circuits, as do Intel's own SX versions of the 486, and also crimps communications with the outside world, squeezing signals into streams of 16 bits instead of 32 bits. In addition, it requires a special motherboard (the core circuit board in a personal computer). Still, Intel reacted swiftly by halving the price of its laptop-oriented chip.

The new clones will be easier on PC makers: They'll be able to use the same motherboard for both Intel and Cyrix chips. The star of Cyrix' new brood—a speedster with a “heartbeat” of 40 megahertz—costs \$159 when purchased in volume, less than half the tab for Intel's slower 33-Mhz version. But Intel's top chip, the 50-Mhz 486, still reigns as the speed champ.

MEDICAL SOFTWARE THAT MAKES HOUSE CALLS

Think you've been stung by a jellyfish or hit with a mysterious ailment? Check out this program: Home Medical Advisor helps you diagnose problems and decide whether a trip to the doctor is necessary.

The software offers a menu of symptoms, diseases, and injuries. Under symptoms, for example, there is an alphabetical list—abdominal



pain, fever, headache—and questions such as: Where is the pain? How fast did it come on? Key in your answers, and the program suggests possible diagnoses out of a total listing of 450 diseases. The software also lists 800 prescription and over-the-counter drugs, along with their side effects.

IBM-PC-compatible, the \$70 program was written by Dr. Stephen J. Schueler of Holmes Regional Medical Center in Melbourne, Fla. With more than 600 color graphics, the software could be addictive to hypochondriacs everywhere.

THE TECHIES VS. THE TECHNO-COPS

U.S. exporters battle widening bans on goods with military uses

Major Western economies are only starting to rouse from a recessionary slumber, and Pentagon spending is in a funk. Small wonder, then, that many U.S. exporters, defense suppliers included, have been scouting for markets in the developing world. They might be having a field day if it weren't for Saddam Hussein. As the gulf war proved, Western companies had helped the Iraqi strongman amass chemical weapons and missiles and start a nuclear weapons program. The Bush Administration's pre-war coddling of Baghdad was more than a little to blame.

Having been burned once, the U.S. is now throwing its heft behind several multilateral groups that seek to block the spread of sensitive technologies to a raft of Third World buyers. Not even friends are exempt: The U.S. has been holding up roughly \$350 million in aid to pressure Pakistan, a former conduit for spiriting weapons to Afghani rebels who warred against the Soviets, into abandoning its nuclear ambitions. All told, such strate-

gies are imperiling billions of dollars a year in sales of U.S. computer chips, scientific instruments, machine tools, chemicals, and other products that could be diverted to military use.

This has angered a broad coalition of U.S. high-tech companies. They argue that export restrictions deny sales to American producers while doing little to check the flow of arms and that a double standard is at work. "We face much tougher treatment than many of our competitors abroad," says Eric L. Hirschhorn, a proponent of looser controls who heads the Washington-based Industry Coalition on Technology Transfer. The French and Russians, for instance, are making aerospace and rocket sales to developing countries.

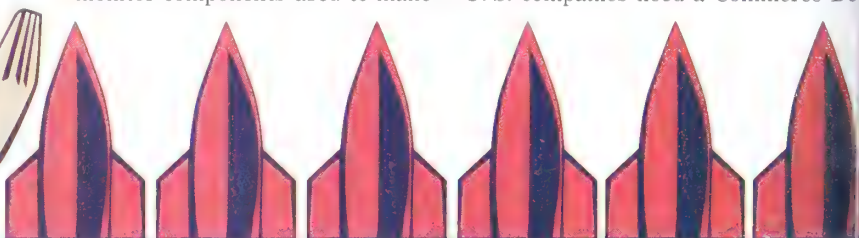
'STRONG STATEMENT.' The rules may get tighter yet. In April, the 27-nation Nuclear Suppliers Group published a list of 65 verboten items that included some scientific-measuring equipment and certain machine tools. And at a June 29 meeting in Oslo, the Missile Technology Control Regime (MTCR) will broaden its reach beyond conventional-warhead missiles to monitor components used to make

chemical and biological weapons. "In the wake of the gulf war, we plan to make a very strong statement," says one State Dept. arms-control expert.

U.S. companies are being drafted to help. A recent Presidential executive order called the Enhanced Proliferation Control Initiative subjects exporters to \$1 million fines, jail sentences, and loss of export privileges if they knowingly sell products destined for foreign missile or chemical-weaponmaking operations without a license. "Technically, a light bulb that ends up at a nuclear weapon plant falls under this rule," fumes Richard Seppa, director of trade administration for Tektronix Inc., an instrument maker in Beaverton, Ore. Now, companies such as IBM and Hewlett-Packard are beefing up in-house export-control procedures. HP, for example, has developed risk profiles to spot customers that may illegally divert its products.

Ironically, the push for new restrictions comes just as the mother of all export-control groups—the Coordinating Committee for Multilateral Export Controls (COCOM)—is dismantling rules that long choked the flow of technology under the Warsaw Pact. But COCOM, founded in 1949, may get a second wind. On June 2, the 17-nation group invited former Soviet bloc countries to help control high-tech sales to the Third World.

Nothing illustrates the clash between exporters and bureaucrats as well as the row over computers. In April, the industry fended off an attempt by the Nuclear Suppliers Group to limit the sales of off-the-shelf personal computers. Still, U.S. companies need a Commerce De-



MONITORING TECHNOLOGY EXPORTS

In the post-cold-war era, a variety of government-sponsored groups are trying to control the flow of sensitive technologies:

MISSILE TECHNOLOGY CONTROL REGIME

(Paris) Restricts the sale of ballistic missile systems and components to the developing world

Solid and liquid fuel rockets, reentry vehicles, guidance and flight control systems

NUCLEAR SUPPLIERS GROUP (London)

Monitors scientific testing equipment and other products that may be used in nuclear weapons programs

Vacuum induction gear, centrifuges, machine tools, lasers, mass spectrometers

AUSTRALIA GROUP (Sydney) This outfit has worked up a list of 50 chemicals and various biological agents that it wants to keep out of the hands of nations such as Iran and Iraq

Certain fertilizers, phosphates, fluoride chemicals

COORDINATING COMMITTEE FOR MULTILATERAL EXPORT CONTROLS (COCOM)

(Paris) Organized in 1949 to monitor exports to the communist world, Cocom is now working with former Soviet

and East bloc countries to tighten up their trade monitoring efforts

Supercomputers, cryptographic and navigation equipment, high-speed streak cameras, and specialized X-ray equipment

ENHANCED PROLIFERATION CONTROL INITIATIVE (Washington)

This patchwork of U.S. regulations imposes stiff financial penalties and jail terms on executives who knowingly export items to conventional chemical and weapons programs abroad without a license

nse to export PCs based on Intel's
ely used 486 microprocessor to coun-
s such as Vietnam and Iran. Says a
yrist for a major computer company:
e're being squeezed between the
st of the old world order and the
st of the new one."

technological advances complicate the
s. A decade ago, it was easy to re-
t sales of supercomputers, whose
ulating power can help design nucle-
weapons. But today, workstations ap-
hich the power of yesterday's be-
hs. So the industry wants new
eria for supercomputers.

he techno-sleuths also see security
ats in scientific-testing equipment.
U.S. restricts exports of such items
scilloscopes, which display electronic
als, and digital voltmeters, though
e are widely available. Tektronix'
a says Siemens and other rivals are
ning up in emerging markets such
ran and Pakistan.

NNED. Policymakers at State and
merce haven't turned a deaf ear to
1 complaints. Secretary of State
es A. Baker III has made export
vth a top priority. That's welcome
s for the commercial-rocket busi-
s. McDonnell Douglas Corp., which
es the Delta satellite launcher, still
nbles about how it lost a \$100 mil-
contract to lift two birds for Brazil
989. The French aerospace giant
nespace offered a more sophisticat-
ocket that technically violated MTCR
ictions. Although a founding mem-
France wasn't taken to task by the
t. "We were stunned," says a Mc-
nell Douglas official.

nce then, the State Dept. has begun
sing MTCR members to toe the line.
group has started going after coun-
outside of the club as well. In May,
g MTCR guidelines, Washington
ed trade sanctions on the Russian
agency, Glavkosmos, for agreeing
ll a cryogenic rocket engine to India
s commercial-satellite program. The
n government, which recently test-
ballistic missile with a 1,500-mile
e, sees retribution in the penalty. It
is that General Dynamics Corp.
e a bid but lost out to Glavkosmos'
n lower quote. "This has nothing to
with nonproliferation," huffs G. Ja-
athan, press attaché at the Indian
assy. General Dynamics says it
ed on the \$200 million deal because
PCR guidelines.

it goes. As more Third World na-
try to break into the nuclear-weap-
club, Western policymakers will
e to keep them from getting the
ology they need. And as Washing-
plays techno-cop, more American
tech exporters are sure to scream
t lost business.

By Brian Bremner in Washington

America's return to time-honored hospitality



Restored and Traditional
European Style Hotels

San Francisco ... <i>The Tuscan Inn</i>	Chicago <i>The Midland</i>	Boston..... <i>The Lenox</i>
San Francisco <i>Vintage Court</i>	Cincinnati... <i>The Garfield House</i>	New York..... <i>The Mayflower</i>
Seattle..... <i>The Mayflower Park</i>	Dallas <i>The Stoneleigh</i>	New York <i>The Gorham</i>
Portland..... <i>Vintage Plaza</i>	Gavlestone.. <i>The Tremont House</i>	Philadelphia..... <i>The Latham</i>
Salt Lake City..... <i>The Peery</i>	Albuquerque..... <i>La Posada</i>	Washington D.C... <i>The Latham</i>
Santa Barbara... <i>Montecito Inn</i>	Santa Fe..... <i>Plaza Real</i>	Atlanta <i>Regency Suites</i>
Honolulu <i>Waikiki Joy</i>		
Anchorage .. <i>Northern Lights Inn</i>		

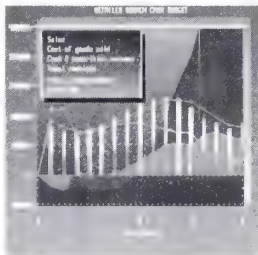
Reservations 1 800 447-9559

THINKCULATOR™

99% inspiration - 1% perspiration

THINKCULATOR™ \$195

153 hyper Programs and 300+ functions
bonds, buy-loan-lease, cash budgets, net
income, cost-volume-profit, depreciation,
RONA, financial growth plan, optimal debt
for the firm, Z-score, loan, forecasting,
decision trees, multi-criteria decisions.

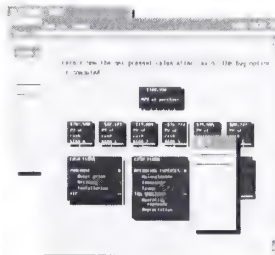


FORECASTING / BUDGETING

INDUSTRIAL WITS™ \$95

320 add-on industrial/engineering applications:
statistical quality/process control, safety,
reliability, sequential/life testing, properties
of industrial materials, air and water pollution.

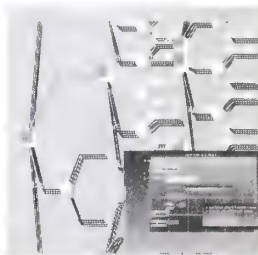
PV-FV-IRR-NPV, mortgage, expert systems with
Monte Carlo simulation, human resources, linear
program, Markov chains, tactical/strategic force
planning, PERT/CPM, inventory, statistics, micro-
economics, marketing-sales, negotiation-law, tax
planning, regression analysis/confidence bands,
1D/2D sensitivity, back-solver, optimizer, etc.



ELECTRONIC MANUAL

BUSINESS WITS™ \$95

320 add-on MBA applications: business operations,
finance, investments, banking, credit line, real
estate, statistics, sampling, advanced inventory,
managerial decisions, valuation, money markets,
options, warrants, bonds, duration, optimum
portfolio, capacity planning, facility location.



DECISIONS / PERT

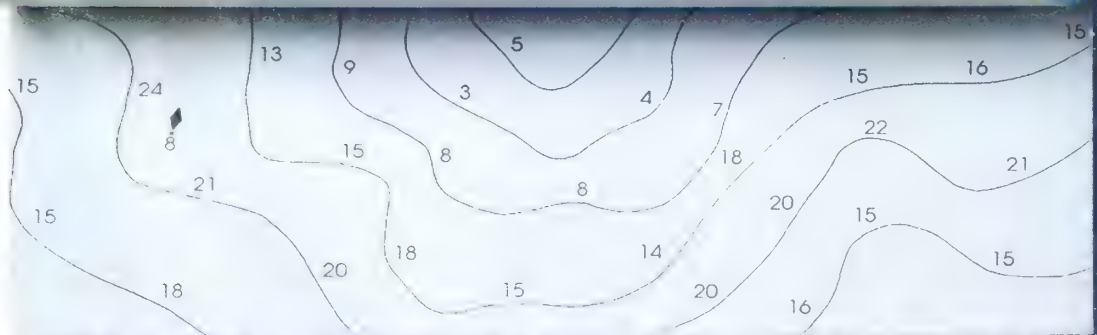
1-800-ONE-WITS™

WITS World Information and
Technology Systems Corporation
625 Cochrane Drive, Suite 904
Markham, Ontario L3R 9R9
(416) 513-9487

1992 by WITS World Science and Technology
Corporation. All rights reserved.

SPECIAL

Order THINKCULATOR and get BUSINESS
WITS free. Add \$17 for S&H. VISA!
and AMERICAN EXPRESS® cards accepted.
Limited time offer.



Derivatives may look confusing on the surface, but their underlying logic is compelling and clear. At J.P. Morgan we present all the alternatives to help our clients choose the course that's best for them.

Exploring the uses of derivatives should be satisfying, not mystifying.

Derivatives don't make risk disappear, but they do make it possible to exchange a risk you'd rather not take for one you're more willing to accept. Options, swaps, and other derivatives are simple in essence, but since they're so versatile, evaluating their various uses can be complex. That's especially true with newer derivatives linked to commodity and equity indices. But it's not our style to magnify complexity. Our success has always been based on helping clients think through every situation fully and clearly. Then we draw on the technical resources of our global network to design the specific tactic that fits your particular strategy. By taking the mystery out of derivatives, we make it easier to take advantage of these important financial tools. It's a key reason we've become a leader in the full range of risk management products.

THE TOUGHEST #&?!%* IN SPORTS

In just over a decade, Jerry Reinsdorf has become a major power in two major leagues

When it came time to talk peace with the NBA, Chicago Bulls owner Jerry M. Reinsdorf had just the spot: his box at Comiskey Park, home to his other pro franchise, the Chicago White Sox. There, in mid-May, Reinsdorf and National Basketball Assn. Commissioner David J. Stern discussed their court battle over Bulls broadcasts on superstation WGN-TV.

But Reinsdorf couldn't keep his mind off the game. Charlie Hough, Chicago's 44-year-old knuckleballer, after retiring the first two batters, walked five in a row. "My God," said Reinsdorf, as the fifth batter to win a free pass trotted to first. "That knuckleball has a mind of its own."

'ON A ROLL.' So does Jerry Reinsdorf. In just over a decade, Reinsdorf has become a major power in two major leagues. He has turned the White Sox and the Bulls into a couple of the best franchises in the industry. He has fought and bested his fellow NBA owners in court over superstation broadcasts that have given the Bulls a national following. He has built a new Comiskey Park, squeezing fat concessions from local government. He has instituted a pay system at the White Sox that helps keep his baseball players' salaries in the park. He is building a new Chicago Stadium with Japanese financing. He may be maneuvering to replace the commissioner of Major League Baseball. And with his Bulls defending their NBA title against the Portland Trail Blazers, Reinsdorf isn't bragging when he draws on a thick Davidoff cigar and says: "I'm on a roll."

Challenging the rules of the old-boy clubs that run big-time sports hasn't made Reinsdorf

many friends, but it may have made him something else: the sports owner of the future. He is an executive whose only business is sports, not a sport who is an executive in some other business.

Reinsdorf won't win any popularity contests—but then he doesn't want to. He just wants to win. And he does, on the court, on the diamond, and in the counting-house. Last year, the Bulls' revenues grew at least 25%, to \$34.3 million, and profits jumped at least 14%, to \$10.9 million, according to court

papers. The White Sox, which in 1991 drew 2.93 million fans to the new Comiskey Park, netted some \$18 million. Says New York Yankees principal owner George Steinbrenner: "Jerry Reinsdorf is running two of the best teams in professional sports. He's taken them from nowhere the top or near the top."

The 56-year-old Reinsdorf himself came out of nowhere. The Brooklyn-born son of a peddler of used sewing machines, Reinsdorf went to work as an Internal Revenue Service lawyer in 1960 after graduat-

ing from Northwestern University law school. His first case: a tax delinquency by Bill Veeck, then owner of the White Sox. Reinsdorf left the IRS in 1964 to go into private practice. When several clients asked about tax shelters, he suggested real estate partnerships put together by a former Northwestern classmate, Neil Bluhm. At the time, Bluhm was founding what would become JMB Realty Corp., today one of the world's largest real estate firms.

BIG BUCKS. While still working full-time as a lawyer, Reinsdorf sold JMB partnerships. In 1973, he and JMB founder Robert A. Judels formed Balcor Co., which raised more than \$650 million to plow into buildings and construction.

The syndications made him wealthy—he's worth some \$100 million today—and Reinsdorf decided to put his fortune to work in sports. In 1981, when

Veeck put the White Sox up for sale, Reinsdorf assembled an investor group that paid \$19 million for the team.

Soon after buying the Sox, Reinsdorf snagged catcher Carlton Fisk from the Boston Red Sox and slugger Greg Luzinski from the Philadelphia Phillies. He tripled the prob-

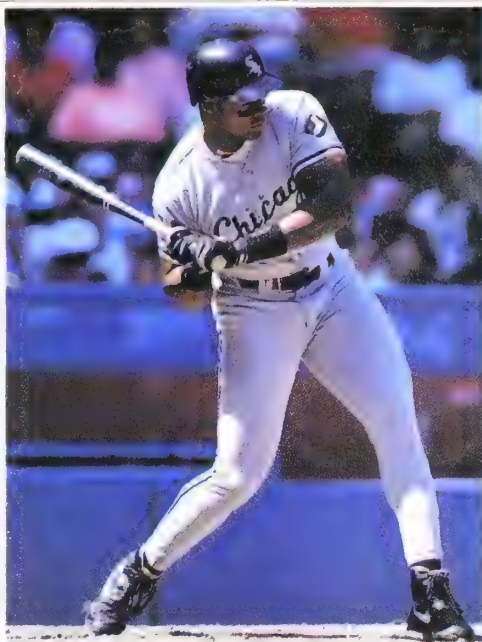


al budget to \$300,000 and boosted number of scouts from 12 to 20. he rebuilding paid off quickly. By 1959, the Sox were in the American League playoffs, the first Chicago baseball team to appear in postseason play since 1959. As in '59, the Sox lost. But they could be playing again this October. Behind the slugging of first baseman Frank Thomas, the team is a power in the tough AL Western Div.

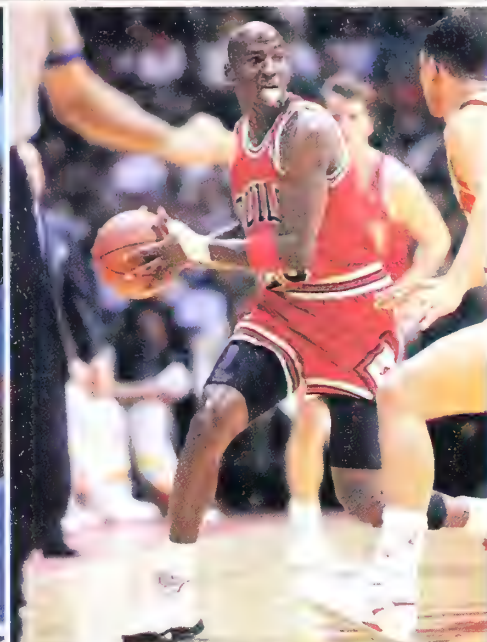
ABOVE: MOVE. One franchise turnaround wasn't enough for Reinsdorf, though. The Bulls, which had just drafted University of North Carolina junior Michael Jordan, were drawing 6,365 fans per game to the 17,339-seat Chicago Stadium in 1985 when Reinsdorf bought control of the team. syndicated the deal, which valued the team at \$16 million, among 28 limited partners. That "was the dumbest thing I ever did," says Reinsdorf. The team's market value is now estimated at \$120 million.

Like the Sox, the Bulls under Reinsdorf have one league championship on their trophy shelf and are vying for a second. But getting there was tough. Operating within the constraints of the salary cap, which limits a club's pay to 53% of its revenues, Reinsdorf assembled a team around Jordan while running the front office. One measure of success: The Bulls, which did not even have an owner-ticket program when Reinsdorf took over, today have an 8,000-person waitlist with maybe 15 openings per year. Financial coups—and controversy—are new to Reinsdorf. In 1982, he sold the team for \$104 million to what is now J.P. Shearson Lehman Brothers, the investment banking and brokerage arm of American Express Co. In 1988, staggered tax-law changes that erased many of the tax advantages of real estate investment, Balcor's \$5.5 billion real estate portfolio was in serious trouble, forcing AmEx to write off more than \$200 million.

Today, Balcor is the defendant in a \$3 billion lawsuit alleging that fraudulently promised unrealistic returns and overstated the risks of real estate investment. Reinsdorf, who is not a defendant in the suit, it has no merit. The Balcor sale left Reinsdorf free to run his sports teams. And he's absentee owner. "I think that the people who own teams in sports are involved in the day-to-day operations," he says. "It's especially hard on all owners. "Base-



SLUGGER FRANK THOMAS AND THE WHITE SOX ARE NEAR THE TOP OF THE TOUGH AMERICAN LEAGUE WEST—AND FANS ARE FLOCKING TO THE STADIUM



CHICAGO BULLS: MICHAEL JORDAN AND THE BULLS ARE BIDDING FOR THEIR SECOND CONSECUTIVE NBA TITLE AND ARE BUILDING A NATIONAL FOLLOWING

ball is a poorly run business," he says.

Clearly, Reinsdorf didn't charm his way to the top in baseball. Instead, his power rests on three key credentials: He built the new Comiskey Park; his team plays in the No. 3 TV market; and as a two-team owner, he can speak with authority on issues ranging from broadcasting to international marketing. "Jerry is clearly the most powerful owner," says Donald Fehr, executive director of the Major League Baseball Players Assn. "He thinks, he plans, he pays attention to detail. He pleads, he cajoles, he urges, he threatens. He's able to do almost anything he wants."

Reinsdorf has become so powerful that some baseball executives believe he's cultivating a rivalry with baseball commissioner Fay Vincent. The rumors flew this year when, at Reinsdorf's urging, Major League Baseball hired former New York City trans-

port chief Richard Ravitch as the league's labor negotiator—at a higher salary than Vincent's. "Paying Ravitch more than Vincent was a slap at Fay," said one National League general manager.

Vincent wouldn't comment on his relationship with Reinsdorf, but the Sox owner denies any friction because of the Ravitch hiring. As for the supposed feud with Vincent: "I haven't said anything bad about Fay Vincent publicly, and I won't," Reinsdorf says. "I like him personally."

Reinsdorf is exerting commissioner-caliber clout in baseball's biggest current controversy. As a member of baseball's ownership committee, Reinsdorf has a large say in the debate over the Nintendo-led bid to buy the Seattle Mariners for \$125 million. Reinsdorf won't discuss his position, but sources close to him say he won't back the deal unless a U.S. investor controls the team's voting shares.

Reinsdorf's pay-for-performance concept is also causing an uproar. Here's how it works: If his young players agree to forgo salary arbitration, available after three years of service, he'll give them long-term, incentive-laden contracts. But players who refuse—and haven't accumulated the six years of big-league service needed to file for free agency—are paid little more than the league minimum. Union head Fehr vows a fight over pay-for-performance when the game's labor

WHERE REINSDOF WIELDS HIS CLOUT

Along with owning the Chicago White Sox, Jerry Reinsdorf sits on Major League councils that make decisions affecting every owner, player, and fan. Here's his portfolio of committee assignments

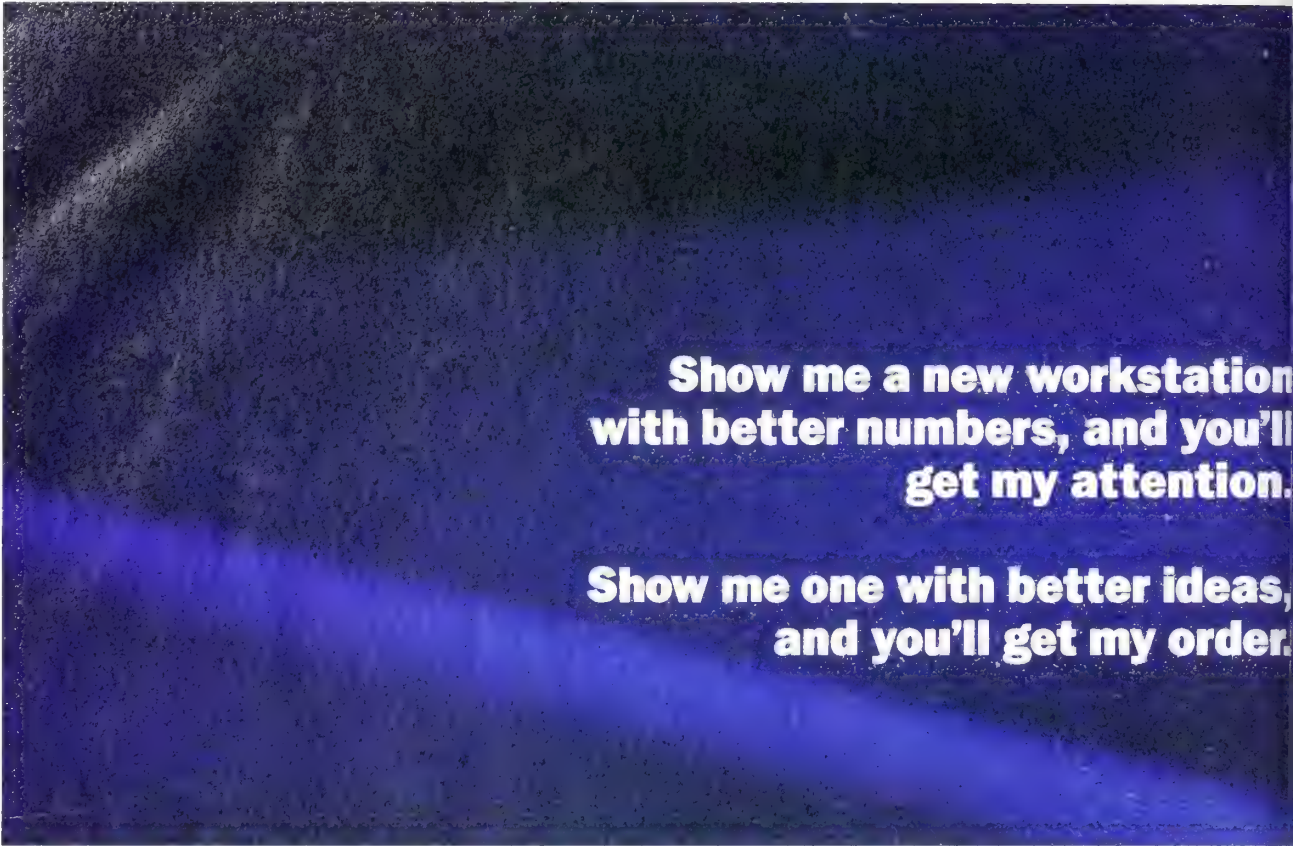
OWNERSHIP COMMITTEE Reinsdorf is closely involved in the talks over Nintendo's proposed acquisition of the Seattle Mariners. Favors local ownership but doesn't rule out a nonvoting stake for Nintendo's U.S. unit

PLAYER RELATIONS COMMITTEE As a member of the group that sets the owners' labor policy, Reinsdorf is pushing "revenue participation," modeled on the NBA's salary-cap formula. And Reinsdorf promoted the hiring of Richard Ravitch as the owners' chief negotiator

SEARCH COMMITTEE FOR NEW AMERICAN LEAGUE PRESIDENT When American League President Bobby Brown steps down after the 1993 season, Reinsdorf and five other owners will recommend a replacement

EXECUTIVE COUNCIL The council's owners have a big say in league policy. During Reinsdorf's tenure, the council clashed often with the commissioner

DATA: BW



**Show me a new workstation
with better numbers, and you'll
get my attention.**

**Show me one with better ideas,
and you'll get my order.**

Introducing SPARCstation 10.



The new Sun™ SPARCstation™ 10 system is four times more powerful than any workstation we've ever made.

But that alone is not enough reason to buy it. The fact that it runs your applications faster, makes your investment go farther, and embraces innovation sooner — those are even more important reasons.

The SPARCstation 10, you see, is not just a model number. It's an entirely new workstation, reengineered from the footpads up, with a faster processor, a faster system bus, faster input/output, faster networking, and built-in multiprocessing.

Yet it's fully compatible with all previous SPARCstation systems. And because it runs the Solaris® operating environment, you can use thousands of existing applications.

There are even four models to choose from, ranging from 86 to over 400 MIPS.

The net result is a dramatic improvement in how quickly those applications run — and a real difference in when your people's work gets done.

That's what gives the SPARCstation 10 its better numbers. Here's what makes it a better idea:

First, we put the processor on a small plug-in card, so you can easily upgrade from one generation of technology to the next for years to come.

Then we equipped the SPARCstation 10 for all kinds of imaginative new applications. Ones that take advantage of its built-in multiprocessing, CD-quality audio, and telephone/computer integration.

We'd love to show you more. Just call 1-800-426-5321, ext. 485 for complete information on the new SPARCstation 10, or the name of your Sun reseller or sales representative.

It's the first workstation to combine such powerful numbers with such potent ideas.

 **Sun Microsystems**
Computer Corporation

© 1990 Sun Microsystems, Inc.

Sports Business

contract comes up for renewal after the end of the 1993 season.

Fehr and others who oppose him should keep in mind that hardball has been very good to Reinsdorf. After the owner complained about old Comiskey Park and threatened to move the White Sox, then-Illinois Governor James R. Thompson forced through a package of incentives to keep the team in Chicago. The state floated bonds to build a new stadium and let Reinsdorf keep all parking and concession revenues, as well as the \$5 million per year from 89 skyboxes at the new Comiskey.

Premium seating is also the key to Reinsdorf's next construction project: a new hockey and basketball arena that will replace Chicago Stadium when it opens in 1994. The new arena will cost \$240 million and feature 216 skyboxes. Revenues from the luxury boxes—all but 11 of which are already leased—have secured a \$140 million, 25-year loan from a syndicate led by Japan's Fuji Bank Ltd.

If Reinsdorf has his way, the new stadium will be a studio for Bulls broadcasts on superstation WGN for years to come, a thought that rankles the rest of the NBA owners and Commissioner Stern. "Jerry disapproved of superstation broadcasts until he moved his games to WGN," complains Stern. Indeed, as a baseball owner, Reinsdorf in 1988 scuttled the attempt of Gaylord Broadcasting chief Ed Gaylord to buy the Texas Rangers. "It's bad for baseball to have owners who can benefit another

business by losing money in baseball," Reinsdorf explains, referring to the low broadcast fees that station owners pay their captive teams—while paying top dollar for marquee players.

NO PAIN. The distaste for superstations evaporated when Reinsdorf got the chance to put the Bulls and White Sox on WGN, which reaches 35 million viewers across America. But the Bulls' 55 regular-season WGN broadcasts compete with the NBA's national broadcasts on NBC Inc. and Turner Network Television. What's more, the Air Jordan show on WGN also competes directly with some local telecasts by lesser franchises. Reinsdorf claims that he's not interested in WGN's national reach. "I just want to be on WGN in Chicago," he says.

The WGN dispute came to a head in October, 1990, when Reinsdorf sued the league, claiming it didn't have the authority to force him off WGN. So far, he has won in court, although the NBA is appealing. But his victory has already cost him and his fellow owners big bucks. Financial data in the Bulls' suit tipped off the NBA players' association that the owners may have lowballed the revenues on which players' salaries are based. Last December, the players formal-

ly charged that the Bulls and other teams understated such items as revenues from foreign broadcasts.

The NBA in January quietly agreed to a \$60 million settlement with the players, some owners are still steamed. Reinsdorf says Jerry J. Colangelo, owner of the Phoenix Suns, "doesn't have very many friends in the NBA."

Reinsdorf is unrepentant about his role in boosting league labor costs. "Don't yell at me because I was the vehicle, this being exposed," he bristles. "If you're doing something wrong, you deserve to be caught."

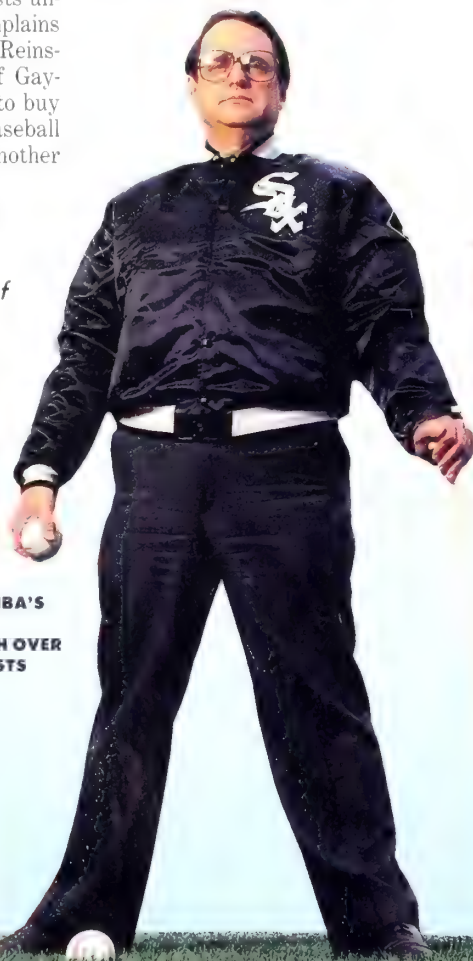
That may sound a bit strange, since it was the Bulls that got caught. But for Reinsdorf, contradictions are part of the package: He may object to the Japanese buying the Mariners, but he's happy to let Fuji Bank finance his new basketball arena. He nixes a bid for a baseball club by a superstation owner but fights fiercely to allow a superstation to beam his Bulls games all over America.

One last contradiction: As an owner, Reinsdorf is all business. But as a fan, he is just as rabid as any hurl-the-beer-can-the-tube type. When the Bulls go on the road, Reinsdorf usually stays at home watching the games on TV. His wife, Mary, tends to leave him alone. "I'm not much fun to be with during the game," he explains. If you don't believe him, just ask David Stern.

By David Greising in Chicago

WHATEVER THE GAME, HE PLAYS HARDBALL

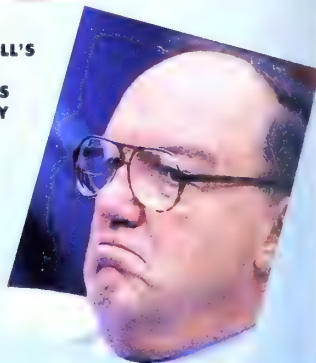
Reinsdorf is changing the rules of the old-boy network that runs big-time sports by approaching ownership as a business rather than a pastime. And that's made him no stranger to conflict



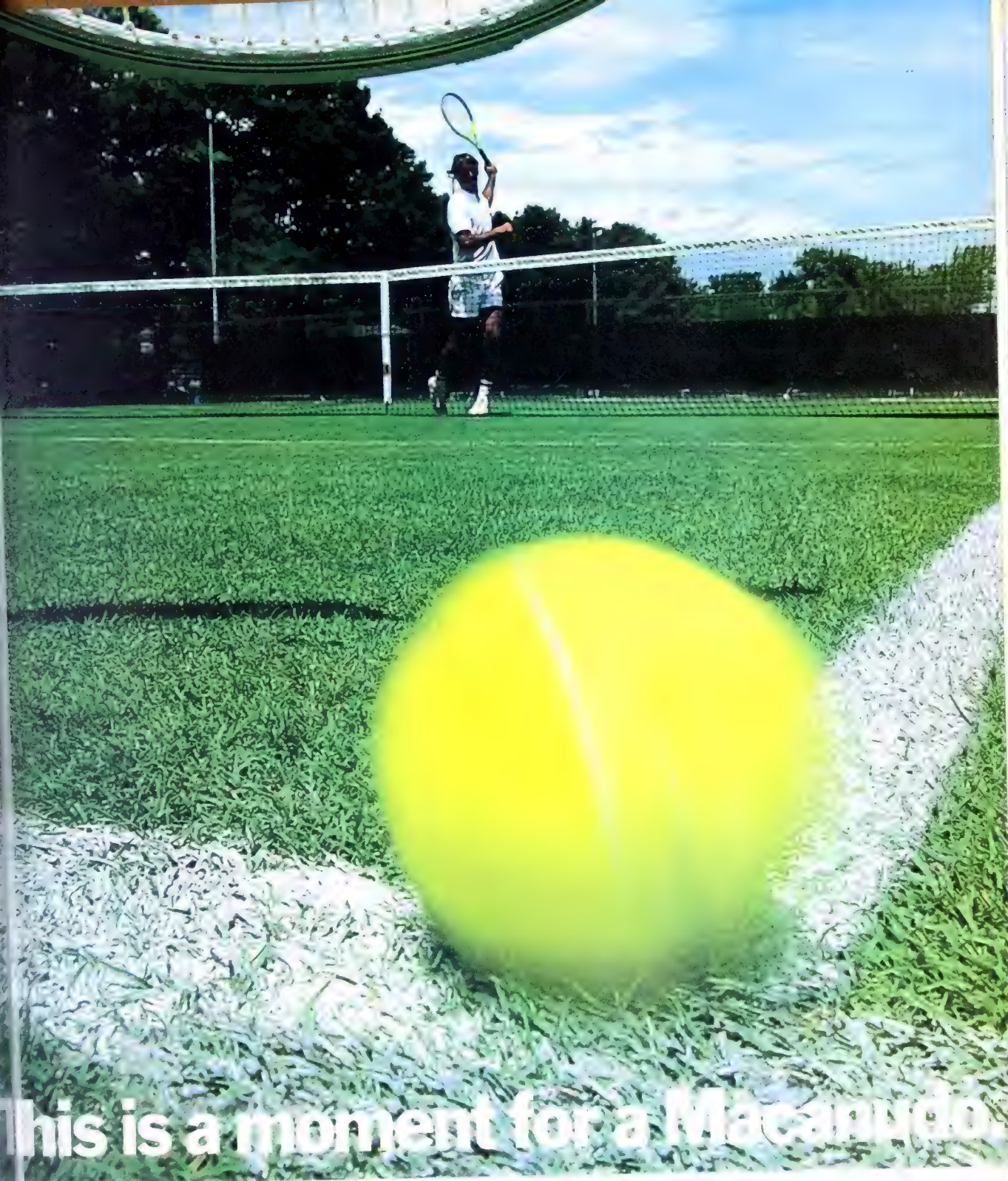
◀ **THE NBA'S STERN: A CLASH OVER TELECASTS**



◀ **UNION LEADER FEHR: ANGRY OVER PAY-FOR-PERFORMANCE**



▶ **BASEBALL'S VINCENT: RELATIONS ARE CHILLY**



This is a moment for a Macanudo

A tennis player's moment to remember has a way of replaying itself in the mind again and again for a lifetime.

And whether you happen to be an A player or a C player, there is always one unforgettable shot that put the finishing touch on a match you had never expected to win.

Such moments to remember are made for a Macanudo cigar. For in an age when speed is all too often the order of the day, the men of Macanudo still take more than two years to turn the finest tobaccos in the world into cigars made entirely by hand.

Just so you can let any moment worth savoring linger on and on with all the taste and aroma of the ultimate cigar.



HOW U.S. FORKLIFT MAKERS DROPPED THE GOODS

Japanese rivals hurt, but Cat and Clark also wounded themselves

Talk about a sad fate for two stalwarts of American manufacturing. On May 28, Clark Equipment Co., the No. 2 U.S. lift-truck maker, announced plans to sell its forklift business to Terex Corp., a debt-laden acquirer of industrial assets, for a paltry \$95 million. No. 3, Caterpillar Inc., is headed for the exit, too: On July 1, it will turn its forklift operations over to an 80%-20% joint venture controlled by Japan's Mitsubishi Heavy Industries Ltd. That leaves the Hyster-Yale unit of NACCO Industries Inc. as the only strong, broad-line U.S. producer in a field where, just 15 years ago, the U.S. was the one to beat. This is the tale of a downfall hastened by ill-conceived fixes for serious problems, plus a failure to adapt to market shifts. And it's a cautionary lesson in how not to manage in a brutally competitive global market.

As recently as the late 1970s, U.S. forklift producers had a lock on the domestic market, which accounts for about 25% of the current \$5 billion in world lift-truck sales. Clark was

the heavyweight, renowned for rugged machines that could last 25 years with proper maintenance. It had 27% of the North American market for its leading product—gas-powered, heavy-duty lift trucks used in factories and warehouses—and its chief rivals were Allis-Chalmers, Caterpillar, Yale, and Hyster. Nissan, Toyota, Komatsu, and other Japanese companies had only a 17% share at

the low end of the market and didn't seem a big threat. "We hardly paid attention to them," recalls Gary D. Bell, president of Clark's forklift unit. The need was little: With forklifts selling well, Clark earned \$106 million on \$1 billion in sales in 1979.

Then, things started to go wrong. The reliable, inexpensive Japanese models did the job for most buyers, even if they lacked fancy features and were less durable than U.S. models. And when the dollar shot up in the early 1980s, the Japanese price advantage widened to as much as 30%. "We couldn't buy components, let alone assemble a machine, for what it cost Toyota to build and export one," says former top Clark executive R. H. Braun. The Japanese also had better economies of scale, which let them obtain many parts "at a considerable cost advantage," says Masatsugu Yoshimura, general manager of Nissan's industrial-machinery division. By 1984, Japan had tripled its share of gas-powered lifts, which account for two-thirds of U.S. sales, vs. one-third for electric models.

DEAD DUD. Meanwhile, Clark and Caterpillar were fumbling the ball. Clark first tried to leapfrog ahead technologically, pouring more than \$25 million into a new lift truck. But when the model came out in 1982, it had too many costly features, such as oil-cooled brakes, and a transaxle that was far more durable than most customers needed. Introduced as an electric, it was such a dud that it was scrapped before a gas-powered version appeared. "We screwed up," says Clark Senior Vice-President Frank M. Simon. Market share and profits began to slide.

Caterpillar began to suffer as well. Its earth-mover dealers were never crazy about selling low-margin lift trucks. As like Clark, Cat didn't respond quickly enough with simpler, cheaper machines when the market shifted. Indeed, it didn't really go head-to-head with Japan in terms of price until 1990, says Larry Wuench, director of North American marketing for Caterpillar Industrial Inc. Cat managed to keep its market share in the late teens, but only at the expense of profits.

Only Hyster had a viable strategy. In 1981, it debuted the XL, a no-frills lift that matched the Japanese on price. To improve quality and cut development time from five to four years, Hyster took the then-radical step of engineering with Japanese-style, cross-functional teams—combining employees from marketing, design, and manufacturing.

Hyster also ripped in

1977-78

Japanese forklift producers start to make inroads in U.S. market

1981

Hyster begins production of its XL forklift line, opens plant in Northern Ireland

1982-83

Depression in the U.S. forklift business. Caterpillar signs agreement with Daewoo to assemble forklifts in Korea

1986

Clark signs a 10-year production accord with Korea's Samsung. Unexpectedly high costs and complex logistics ultimately erase much of Cat's and Clark's Korean edge

1987

Hyster wins its antidumping case against Japanese producers, later wins duties. As a result, Japanese producers begin manufacturing in the U.S.

1991

Caterpillar starts negotiating deal for an 80% Mitsubishi-owned joint venture to make its key forklifts in Houston

1992

After seeking a buyer for six months, Clark announces sale of its lift-truck business for a paltry \$95 million

FORKLIFTS: THE DECLINE OF CLARK AND CAT

How mistakes and Japanese rivals forced both companies to pull back



...s. It got the British government to
...e up the price of a new plant in
...igavon, Northern Ireland. And it
...inated jobs: By the time NACCO In-
...tries, which controlled Yale, bought
...ster in 1989, it was making as many
...ks as it had 10 years earlier, with
...as many employees. Hyster-Yale is
...y competitive—definitely a low-cost
...ducer,” says Takuma Fujita, general
...ager of Toyota’s overseas industrial-
...ment division. The result, says Da-
...Crocker, a consultant in St. Paul,
...n., is that Hyster has held on to its
...market share. And it made money
...ugh the 1980s.

Meanwhile, Clark and Cat, bleeding
...ink, began to scout
...ap manufacturing
...Cat settled on Ko-
...and in 1983 signed
...Daewoo Heavy In-
...ries Ltd. to do most
...ts production. As a
...lt, it closed a Mentor
...o plant.

Clark first moved
...Michigan to lower-
...Kentucky. Then, in
..., it set up a Korean
...ure with Samsung
...p. The companies
...the moves cut costs,
...ving them to stay in
...lifts. But rivals say
...savings were small,
...n the disruptions in-
...ed. “If low-cost la-
...were the key to this industry, we’d
...e in Bangladesh,” says Hyster-Yale
...ident Reginald R. Eklund.

Indeed, Korea was no panacea. The
...e created “very complex logistics,”
...edes Richard A. Benson, president
...aterpillar Industrial. For starters,
...closed its Ohio plant too early, leav-
...ome dealers without key models for
...nine months. Its lengthy new sup-
...chain meant big inventories and,
...times, shipment delays. The opera-
...never seemed to have enough of the
...kind of tires on hand. And at one
..., Cat had to airlift key parts from
...a to meet changing customer de-
...l. “We were always out of phase
...the marketplace,” notes Wuench.

E REINS. It soon became clear that
...ing out production had other draw-
...s. “If you lose control of your man-
...uring, eventually, you lose control
...ngineering—and the product,” con-
...J. Phillip Frazier, Hyster-Yale’s
...man. And the savings weren’t as
...as expected. Korean wages tripled
...g the 1980s as workers demanded
...r living standards, notes Daewoo
...dent Lee Kyung-Hoon. And the dol-
...24% fall vs. the Korean won be-
...w 1986 and 1989 raised costs even

Not surprisingly, none of this turned
...back Japan’s advance in the U.S. Final-
...ly, in April, 1986, Hyster filed a dumping
...complaint. The International Trade Com-
...mission ruled in Hyster’s favor, and in
...June, 1988, Washington slapped import
...duties of up to 51.3% on Japanese mod-
...els. To avoid paying, the Japanese quick-
...ly set up U.S. assembly plants—and
...held their U.S. market share at about
...50%. Still, Clark, which finally intro-
...duced a lower-cost product in 1985,
...couldn’t stop its market share slide until
...1990—at 20%.

What happens now? Ironically, U.S.-
...based production is the rage. Cat’s new
...venture with Mitsubishi is in Houston.

Benson insists that the
...combination of Mitsubi-
...shi’s production strength
...and Cat’s distribution
...and service will help the
...venture thrive. And
...Terex is expected to go
...ahead with Clark’s plan
...to bring its production of
...gas-powered machines
...back home.

But Terex seems un-
...likely to make the heavy
...investments in new
...Clark products that will
...be needed as the market
...evolves. The company is
...52% controlled by chair-
...man Randolph W. Lenz
...and 9% owned by a part-
...nership controlled by

Fort Worth billionaires Lee and Sid R.
...Bass. It has bought eight other troubled
...capital-goods companies since 1983, in-
...cluding Fruehauf Corp.’s truck-trailer
...business. That has driven up its long-
...term debt to \$212 million—a hefty 70%-
...plus of capital.

Lenz won’t comment for now. But
...based on his record, says Crocker, he’ll
...try to boost profits at the expense of
...market share. He’s likely to consolidate,
...slash overhead, and try to expand
...Clark’s high-margin spare-parts opera-
...tion. He may let market share in low-
...margin, gas-powered lift trucks fall and
...focus on more profitable electrics.

If so, he had better heed Hyster’s ex-
...ample. Japanese companies are now
...starting a push to increase their market
...share in electric lift trucks, where much
...growth is expected. Whether the Yanks
...can hold on to those markets depends on
...what seems like a simple recipe: meeting
...the competition head-on with simplified,
...easy-to-manufacture designs and tight
...cost control. Still, as Clark and Cat have
...already shown, that formula can be hard
...to get right.

*By Kevin Kelly in Chicago and Zachary
...Schiller in Mentor, Ohio, with Robert Neff
...in Tokyo, Laxmi Nakarmi in Seoul, and
...Roos Lewald in Bonn*

OF THE THREE
LEADING U.S.
PRODUCERS, ONLY
HYSTER REMAINED
PROFITABLE
THROUGH THE
1980s



Thank Dad
for being more proud
than angry.



Ultimately, there's Black.™

Send a gift of Johnnie Walker® Black Label®
anywhere in the U.S.A.

Call 1-800-238-4373. Void where prohibited.

© 1992 SCHIEFFELIN & SCHIEFFELIN CO., NY, NY. JOHNIE WALKER® BLACK LABEL®
BLENDED SCOTCH WHISKY. 40% ALC/VOL (80 PROOF).

THE BEST JURORS MONEY CAN PICK

More businesses are taking trial consultants to court with them

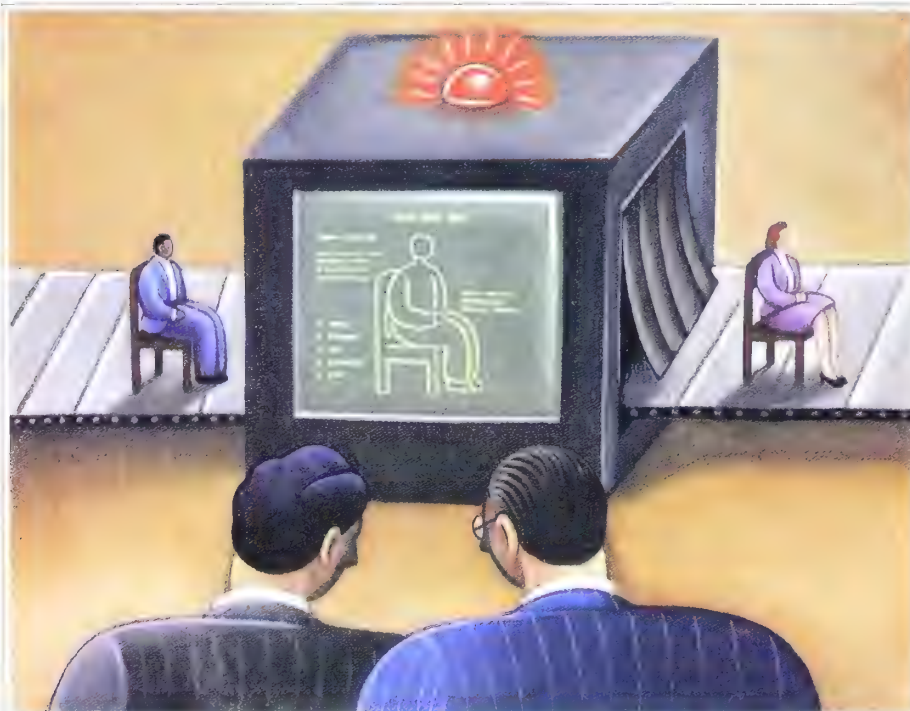
Defense lawyers in the trial concerning Rodney King used them to find jurors sympathetic toward police. Attorneys for William Kennedy Smith used them to find jurors with courageous, independent minds. Companies from Shell Oil to Dow Chemical use "trial consultants" in all kinds of cases to gain an edge over opponents. Says Shell Senior Litigation Counsel Burt Bal-

Take Graff's client, Minolta Camera Co. After Honeywell Inc. sued it for patent infringement on its autofocus cameras, the Japanese camera maker was concerned about going before an American jury. And Minolta executives—many of whom had never been to the U.S.—were nervous about testifying. Minolta brought in Jury Analysts Inc., which surveyed hundreds of potential jurors

read juries by body language or assemble "shadow juries" who sit in court and give reports (table).

Critics say such techniques do more harm than good. "You can get a worse jury with a trial consultant than you would with common sense," says Thomas P. Puccio, a New York trial lawyer. Others blast the tactics as improper manipulation. "All this is just a form of tampering with the jury, and I would prohibit it," exclaims sociologist Ami W. Etzioni, a longtime critic. But Litigation Sciences' Robert Minick says "the notion of manipulation in this context is kind of silly. The whole trial manipulation."

Trial consulting didn't really exist until the early 1970s, when such defendants as antiwar activist Phillip F. Bergan feared they'd be denied a sympathetic jury and turned to soc-



HOW TRIAL CONSULTANTS WORK

JURY PROFILES

Conduct polls, hold focus groups, and run computer programs that predict behavior of potential jurors

MOCK TRIALS

Recruit surrogate jurors to hear case summaries and reach a verdict; their reactions help shape the presentation of evidence at trial

SHADOW JURIES

Find surrogate jurors who mirror the real jury demographically; they provide feedback as the trial unfolds

COMPUTER ANIMATION

Create elaborate computer programs that recreate events or processes in dispute; these help sway jurors in trial

DATA BW

lanfant: "I use them, but cautiously."

With names such as Litigation Sciences, DecisionQuest, and Jury Analysts, trial consultants boast expertise that goes far beyond jury selection. They sell advice on such subjects as where to hold a trial and how to talk to jurors. While their services may be more art than science, and results are unpredictable, business is booming. "In this litigious environment, it's becoming more and more important to make sure your case is as effective as it can be," says Dow Chemical Assistant General Counsel Ronald L. Davis. New York lawyer George Graff is more blunt: "You do it because you're afraid not to."

about their attitudes toward the Japanese and Minolta. This reassured it that jurors would be fair. The firm also found surrogate jurors to hear the Japanese executives tell their stories. Even though the real jury awarded Honeywell \$96 million, Graff says the work paid off: The jury sided with Minolta on two key issues, keeping the award from going higher.

BODY LANGUAGE. Most trial consultants are psychologists, sociologists, and communication experts who use various tools to predict and sway juror behavior. Some favor the traditional interviewing methods of social scientists; others rely on fancy software. A few claim they

scientists for help. Soon, corporations hired consultants in bet-your-company kinds of cases, including MCI Communications Corp.'s antitrust suit against American Telephone & Telegraph Co.

These days, it's common to find consultants on both sides of routine business disputes. And more people are flashing business cards as trial consultants. Founded in 1983, the American Society of Trial Consultants has swelled from 19 members to 250. The competition is getting rougher because the money is so good: Consultants charge from \$150 an hour to hundreds of thousands of dollars for a package of services. Litigation Sciences Inc., the market leader,



“If our copiers are working,
our people are working.”

The performance of your
high-volume copying systems is
critical to the productivity of your
organization.

That's why we're proud to
offer The Corporate Line of highly
productive high-volume copying
systems—copiers uniquely

designed for the demands of companies like yours.

The Corporate Line, featuring the NP 9800 and our
NP 6060, was designed for durability day in and day
out. These copiers take productivity beyond delivering more



THE CORPORATE LINE

copies per minute. With fast first copy
speeds so your people spend less time
completing short runs. Sophisticated
document handling and finishing capa-
bilities for complete stapled sets at
the touch of a button. And innovations
like the largest paper capacities in the
industry so your people spend less time

at the copier, and more time working.

The Corporate Line, from Canon. For ten years,
America's #1 copier company. And now the new power in
high-volume copying. Call 1-800-OK-CANON.

Canon

has annual revenues of some \$25 million.

But even the most successful trial consultants say that gauging their effectiveness is tricky. Unlike most criminal cases, where defendants are either found guilty or innocent, winning in civil cases means different things to different companies. For example, a corporation might claim victory if it's found liable but avoids a punitive-damage award. Litigation Sciences boasts a 96% accuracy rate in predicting the final outcome of their clients' cases that go to trial—but doesn't guarantee that they'll win.

At their best, trial consultants help lawyers gain invaluable insights into what juries will find convincing. The consultants also help lawyers get a sense of how their clients will be perceived—which could affect their decision to settle. Manhattan lawyer Stanley S. Arkin hired Ann Cole to find out what New York residents thought about arbitrator Salim B. Lewis, whom prosecutors had charged with stock manipulation. Lewis eventually pleaded guilty.

Cole wouldn't reveal her findings, but she says that in the half-dozen Wall Street cases she worked on in the late 1980s, she found potential jurors had "a lot of anger and resentment toward the wealthy and a need to find scapegoats." This helped Arkin win an acquittal for a Wall Street defendant by portraying arbitrator D. Ronald Yagoda as a decent, hardworking family man.

BACKFIRE? The consultants' most controversial technique is one of the most intrusive: shadow juries. National Union, an insurer, was battling 336 investors seeking damages for emotional distress over the 1986 collapse of the investment firm Technical Equities Inc. when it hired Jury Research Institute to find the limits of its exposure. Jury Research assembled a shadow jury of four to mirror the views and demographics of the real, 12-member jury. Shadow jurors earned \$100 a day and attended the trial for 2 of its 4½ months. Defense lawyer Archie Robinson says the shadow jury's feedback made him more aggressive toward the plaintiffs because "we knew how far we could go." The real jury awarded 172 plaintiffs \$6.25 million, about two-thirds more than the shadow jury. But Robinson says the size of awards to individual plaintiffs followed a decreasing pattern predicted by the shadow jurors.

Trial consulting techniques can backfire. A key risk, lawyers say, is that through pretrial discovery, a consultant's research will wind up in the hands of an opponent. And because the field is unregulated, companies can wind up spending wads on "a lot of baloney," as lawyer Arkin puts it. Still, given the increasing stakes of litigation, the market for trial advice is certain to grow.

By Michele Galen in New York

Marketing

SCAMS

COUPON SCAMS ARE CLIPPING COMPANIES

With fraud nearing \$1 billion a year, marketers are fighting back

Dennis Szewczyk has seen a lot as a detective. He has combed through trash to hunt for clues. He has gone undercover to catch a thief. Counterfeiting? He knows all about it. In 1990, he helped snare Joe DuBois, a salesman turned counterfeiter. Yes, there's action aplenty in coupon fraud.

Coupon fraud? Don't laugh: Consumer goods manufacturers don't. Companies such as Ralston Purina Co. hire Szew-

retailers who submit coupons to manufacturers fraudulently: They get coupons not from shoppers buying products but in bulk from various sources.

What's really jolting the industry is more action is the surprisingly large time on rebate fraud: Last year, CIC figured manufacturers were paying out some \$320 million annually to artists sending in rebate forms, though offers to pay cash for proofs of purchase

THE COUPON CON

How cheaters profit from coupons and mail-in offers

THE FAKE STOREFRONT

A scam artist rents space cheap, sets up a store, then starts sending in coupons to manufacturers for payment. Pretty soon the store's shelves are bare, but the "owner" is still sending in coupons he has obtained illegally

STUFFING THE BALLOT BOX

A retailer legitimately obtains cash from clearinghouses and manufacturers for all the coupons handed in by shoppers. But he boosts his take illegally by sending in extra coupons purchased at steep discounts from various sources, such as unscrupulous printers

PLAYING THE MIDDLEMAN

An ambitious operator can make money supplying other operators—by collecting coupons by the pound and selling them to retailers, buying and selling proofs of purchase, or counterfeiting coupons and proofs of purchase

THE REDEMPTION SCAM

Manufacturers offer big cash rebates on large items to shoppers who mail in forms together with proofs of purchase—receipt labels, or box tops. A con artist uses the rebate forms and proofs of purchase, either real or counterfeit, to illicitly collect the refunds without buying the products



DATA COUPON INFORMATION CENTER POSTAL SERVICE, BW

czyk and other investigators to track down con artists who make a killing with fake or illegally redeemed manufacturers' coupons and rebate offers. "We take this very seriously," says Marion Milrod, manager of advertising and promotion services for Heinz USA Div. "It's a real money-losing proposition for us when our coupons are misused."

It's not a small-time racket. Bud Miller, operations manager for the Coupon Information Center, estimates companies pay out coupon refunds totaling more than \$800 million a year to retailers and consumers who don't deserve them (table). Some \$500 million go to

chase such as labels or bar codes

Rebate forms are a standard promotional tool, but most manufacturers prohibit a product buyer from transferring a rebate form to another party. And they usually limit the number of offers per household. Big-league scamsters cumulate thousands of proofs of purchase, or simply counterfeit them, to get refunds without buying products. They often set up post office boxes to avoid the limit per household. They also money to be made selling counterfeit proofs of purchase. According to postal inspectors, Joe DuBois reduced bar codes. Inspectors say he



WHAT'S IN THE CARDS FOR HARVEY GOLUB?

If the president of American Express can beef up its core business, his star could rise even higher

The scene was the cafeteria at American Express Co.'s headquarters in Manhattan's glittering World Financial Center in late April. Hundreds of employees of AmEx' flagship card unit, American Express Travel Related Services Co., had gathered expectantly for a quarterly update and the chance to see their new boss up close. Harvey Golub, AmEx' president and CEO of TRS, told a few jokes and explained

his five-point strategy for attacking TRS's problems. Then he made a surprisingly frank admission. "What would TRS look like when we've been successful?" Golub asked employees. "I would like a reasonably crisp definition [of] that vision. That is a task undone."

The meeting is vintage Golub. For years, AmEx has been unable to face up to its rapidly escalating problems. With a combination of bluntness and humor,

Golub is trying to jolt employees out of their complacency and rally them to the daunting task of fixing what is the heart and soul of American Express: its credit card business. The AmEx card is under siege from lower-priced bankcards, restaurant merchants, and defecting customers. Between 1987 and 1991, its worldwide market share has dropped from 20.3% to 14.5%, says the *Nilson Report*, while Visa's has grown from 44.7% to 51.0%.

Golub, 52, is fighting back to preserve AmEx' franchise. Accepting that AmEx' years of phenomenal growth are over, he is focusing on protecting a smaller, affluent customer base. To rebuild fading customer loyalty, he is trying to demonstrate more graphically to merchants as well as cardholders that AmEx service is unique and worth its higher price. And he has relaunched the loss-ridden Optima card, stemmed the merchant backlash against high AmEx fees, and stepped down on "suppression"—the tactic of punishing merchants who discourage use of AmEx cards.

IT'S HOW. More broadly, Golub is seeking to change AmEx' corporate culture from a highly political bureaucracy that relies on slick ads and all products to a collaborative environment where each employee focuses on customer service. Further, Golub widely acknowledged within AmEx to have introduced a well-needed dose of reality. "Harvey might get a sense of: here's how we're going to look at the business, and how we're going to behave, and march forward," says TRS president Jonathan S. Linen.

Golub, who could succeed James Robinson III as CEO, is also bringing a refreshing new style to AmEx. To many employees, Robinson seems remote and formal. In contrast, Golub is gregarious and down-to-earth. Around AmEx, Golub seems ubiquitous. Walk through the headquarters lobby, and there's bound to be a stack of letters from Golub giving his reply to a current news story. AmEx or extending a "Lunch with Harvey" invitation to the first employees who sign up. He has a video for a new program he created for all of AmEx' 50,000 employees and their spouses to help convince neighbors and friends to use the AmEx card. He is going to make 50,000 sales calls, says Golub.

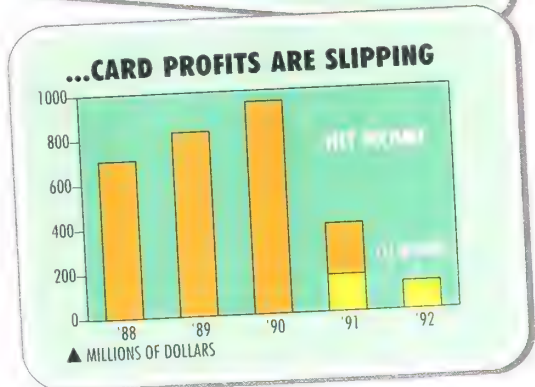
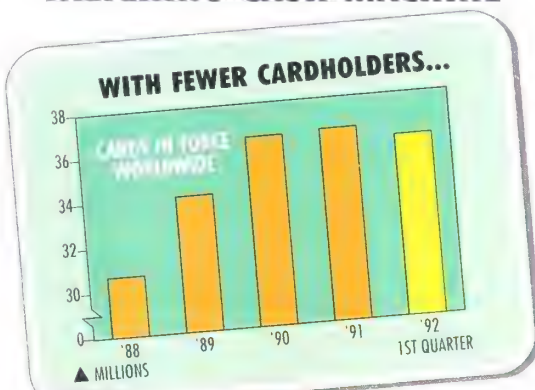
Golub's frank admission of his unarticulated vision suggests he is still grappling for solutions. A renewed focus on service, he believes, may not be enough to differentiate the AmEx card from bankcard competitors. Further, AmEx' once legendary marketing prowess has been unable to redefine the yuppie image of the 1980s for the parsimonious 1990s. Most importantly, Golub's strategy is aimed at putting out fires, while broader questions remain unanswered.

Adding in the balance is the future of the great American brand name. If he can't fix TRS, AmEx will be forced to dramatically to remain profitable.

Also at stake is whether Golub will become AmEx' next CEO. Though he is the clear number two, there's no formal succession plan. Golub's mission, says an adviser to the AmEx board, "is ultimately the salvation of the company."

Golub is an unlikely savior for an august pillar of the American Corporate Establishment. Robinson is the son of a prominent Atlanta banker and has a

THE NO. 1 JOB: FIX AMEX' FALTERING CASH MACHINE



DATA: AMERICAN EXPRESS CO. SALOMON BROTHERS INC.

Harvard MBA. Golub, a burly bear of a man, grew up in Brooklyn, the son of a small businessman with a grade-school education and the grandson of a Russian immigrant. Three of his father's businesses went bankrupt. One made women's handbags during World War II but went broke after his father refused to buy supplies on the black market. Golub flunked out of Cornell University after two years but later earned a B.S. from New York University.

Golub has certainly demonstrated his capability as an ace AmEx problem solver. As a McKinsey & Co. consultant working for AmEx in the late 1970s, he helped devise a strategy that successfully defended AmEx' traveler's check franchise from fierce competition from bank traveler's checks. In 1984, he had caught the attention of Sanford I. Weill, then president of AmEx, who recruited him to head IDS Financial Services, which AmEx had just acquired.

IDS was a sleepy Minneapolis company that sold mostly mutual funds and insurance via direct mail and a sales force of 4,000 financial planners. Golub discontinued the direct-mail operation and expanded and revitalized the sales force. Next, Golub launched what was then a new strategy for IDS and the industry: selling customers a written financial plan. Previously, IDS planners had simply discussed plans with customers. When customers pay for a plan, they tend to carry it out by purchasing 90% of their financial products from IDS. Since 1984, IDS earnings have grown an average of 22% each quarter.

HARVEY BEARS. Golub also put great stress on earning employee loyalty. He held frequent meetings with employees to explain his strategy. By the time he left, Golub was so popular that a valued prize for sales performance was a Harvey bear—a teddy bear with glasses, suspenders, and mustache, just like Golub. "He was not someone up on a high floor in a building you saw through pictures. You saw him as a person. You knew he was credible," says Susan Plimpton, an IDS marketing vice-president.

Despite his bottom-line success, Golub earned the animosity of some employees. IDS is the target of a \$140 million age-discrimination lawsuit filed in U.S. District Court in Minneapolis by 32 financial planners. Some blame Golub for pushing them out in favor of younger people to carry out his aggressive growth plan. IDS says that Golub installed tough performance standards and held division managers accountable. Some were fired after

they couldn't meet the new goals. "It was never a question of age. It was a question of meeting new performance standards," says an IDS spokeswoman.

Golub also raised a few eyebrows in Minneapolis, where conspicuous consumption is considered poor taste. According to the Minneapolis *Star Tribune*, Golub built the most expensive house in the state, worth \$6.9 million.

Largely because of his record at IDS, Robinson asked Golub in late 1989 to

take broader responsibility in the corporation. Earlier that year, AmEx president and heir apparent Louis V. Gerstner Jr. resigned abruptly to take a job as CEO of RJR Nabisco. Golub began spending several days a week in New York to work on finance and strategy. In September, 1990, Robinson made Golub vice-chairman.

The following year, Golub and Robinson turned their attention to the faltering card business. They immersed themselves in the nuts and bolts of TRS. Impressed by Golub's quick grasp of TRS's problems, Robinson appointed Golub to the then-vacant post of president.

But it was the severity of the Optima crisis that spurred Golub's most important promotion. In October, 1991, AmEx unexpectedly announced a \$265 million earnings write-down at TRS, with \$155 million for Optima losses and reserves. TRS would have its first money-losing quarter ever, and analysts feared that serious problems would surface in AmEx' other card businesses. The incident, says TRS's Linen, "set the demons free. We were able to face the truth, look in the mirror, and say: 'We've got a problem.'"

RATE-CUTTER. Robinson made Golub CEO of TRS with an immediate mandate to fix Optima. Golub moved quickly. To make Optima stand out in a crowded market, Golub drastically cut interest rates to good customers months before the bankcard marketers did.

Now he is focusing on his toughest challenge: bolstering the AmEx card itself. Instead of growth at any cost, he is stressing profitability and has implemented new "health of the franchise" measures to determine precisely, for instance, the rate at which longtime members are dropping the card. The AmEx sales force is making more sales calls to existing merchants instead of trolling for new signings. Further, AmEx is re-treating from its 1980s push to sign up as many establishments as possible. "We don't have to be everywhere but we have to be where card members use the card," says Kenneth I. Chenault, president of AmEx's consumer card group.

Golub's top priority is to protect the still-plump merchant fees that generate more than half of AmEx' revenues. Not taking the AmEx card will cost a merchant business, AmEx argues. One big reason is that the 5.1 million AmEx corporate card users traveling on business are highly motivated to put all their charges on their AmEx cards, as are the

850,000 Membership Miles participants who want to use AmEx to get frequent flier miles. AmEx is also trying to sell merchants on its ability to increase their sales through its direct marketing operation and its LifeCo travel agency.

AmEx is trying to bolster its ties with cardholders, who are being polled on their likes and dislikes and bombarded with promotional offers. To enhance value, AmEx is working to add major airlines to Membership Miles and is considering a similar hotel card for frequent guests. The idea: While it may lose some customers, those who remain will be more loyal and use the card more often.

With an extra \$250 million budgeted for 1992 to retain merchants and cardholders, Golub urgently needs to cut costs elsewhere. He

four-day event a family affair by inviting spouses to strategy meetings and even welcoming children to the event.

So far, Golub has more problems than results. AmEx' current print ad campaign has been criticized for lack of class and warmth and for not articulating what makes AmEx special. AmEx has been unable to communicate the campaign's theme of prestige and financial responsibility. Already, AmEx dropped several unpopular ads in its lineup. Golub admits the current need to be less rational and more emotional but insists they are working. "It's not a 10, but it's O.K.," he says.

HOT ISSUE. The problems on the ad front may be symptomatic of Golub's unfinished agenda. He has not yet stated a long-term mission for AmEx that clearly differentiates AmEx in a commoditized market, where cards are increasingly just interchangeable transaction facilitators. While Golub talks about refining the concept of prestige for the 1990s, he has not yet done it.

But Golub sees encouraging signs. AmEx has successfully headed off restaurant revolts in five major cities, avoiding another uprising like the one in Boston last year. Optima's new pricing caused several banks to create copycat programs. The corporate card just wooed West Communications back from Visa International and has a major agreement with American Telephone & Telegraph to offer small businesses a combined AmEx and AmEx card. Best of all, Golub thinks Visa may soon raise the fees it charges member banks, which would make AmEx' merchant fees more competitive. The issue will be discussed at June 3 Visa board meeting as it is every year, says a Visa spokesman.

But the hottest issue around AmEx these days is when or if Golub will succeed Robinson. While Robinson anointed Golub as the clear No. 2 AmEx executive, he resists labeling Golub as his heir apparent. The board "was not making a decision about succession," says AmEx' prestige-conscious board. Golub believes Golub lacks the seasoning and blue-chip pedigree to run AmEx, according to sources close to the board. But if Golub turns TRS around, he would be a formidable candidate. Says Robinson: "Does Harvey have the capability to be boss of everything? Of course he does. But to get the job, Golub will have to go beyond putting out fires. He will have to come up with something much more positive, that 'reasonably crisp definition of what TRS—and AmEx—should look like in the future."

By Leah Nathans Spiro in New York

GOLUB'S RAPID RISE TO POWER

JAN., 1984 Appointed president and CEO of AmEx subsidiary IDS Financial Services in Minneapolis

SEPT., 1990 Promoted to vice-chairman of American Express at New York headquarters

JULY, 1991 Named AmEx president

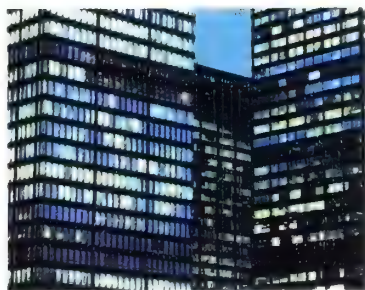
OCT., 1991 Given additional title of CEO of Travel Related Services after AmEx announces huge losses stemming from Optima card

DATA: AMERICAN EXPRESS CO. BW



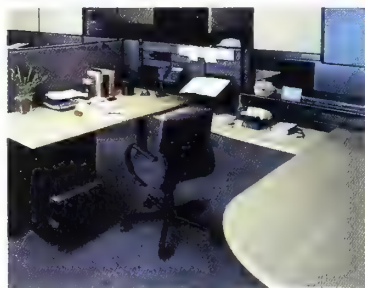
plans to squeeze TRS costs down by from \$500 million to \$1 billion in the next three years. Instead of slashing a straight 10% from each division, he is betting on "re-engineering," a management process that cuts costs while improving service by running the business more efficiently. For example, AmEx has consolidated seven worldwide data processing centers into two, with 150 less people and a savings of \$25 million. AmEx currently has 57 different re-engineering programs that are expected to save from \$500,000 to \$50 million each.

For re-engineering to work, Golub needs more cooperation among TRS's discrete fiefdoms in the green, gold, platinum, and corporate card divisions. To get managers to work together, he has modified their bonuses so that they are no longer determined by each business unit's results but by TRS's profitability. To reduce feuding between TRS and AmEx corporate staff, Golub for the first time invited AmEx corporate managers to a TRS management meeting in California in early June. He made the



**The average employee
spends 9.6% more time
at the workplace
than in bed.**

**Fortunately, this is
no average workplace.**



It's the RACE® furniture system by Haworth. Simply beautiful. Beautifully adaptable. Designed for the way business people really work. ▼ We know, because we've been working with them for over 40 years. Making work spaces more comfortable. Work hours more productive. ▼ Could a Haworth system mean more quality time and less overtime for your employees? For information about our company and our complete line of office furniture, call Laura Cramer at 1-800-344-2600.

HAWORTH WORKS FOR BUSINESS.

HAWORTH®

ANOTHER BLACK EYE FOR COOPER

The brawling contact-lens maker faces new investor ire

Wasteful spending. Questionable deals. Allegations of executive greed. Inate shareholders. This is the combustible mix that for years has swirled around Cooper Cos., a New York health care outfit specializing in contact lenses—and, apparently, misadventure.

Four years ago, dissident shareholders ousted CEO Parker G. Montgomery. Now Montgomery's replacements are under even more intense fire. One of the new officers, Co-Chairman Gary A. Singer, 37, has been implicated in an alleged insider-trading scheme. Another shareholder group is mounting a proxy fight to seize control of the \$33 million company. Says one investor: "The 1988 posse has become the 1992 rustlers."

At the center of the 1992 imbroglio is the Singer family, which helped lead the charge against Montgomery in 1988. The Singers, who hold at least 6.1% of Cooper's stock, dominate the company's board. Of the 10 directors, 3 are Singer brothers (Gary, Steven, and Brad) and a fourth is Steven's father-in-law, Joseph C. Feghali. A fifth director, former Cooper CEO Arthur C. Bass, has a \$900,000 loan from the company, so critics say he can't be very independent. (The company says Bass will soon pay off a major portion of the loan.) Two other directors are corporate officers who are close to the Singers.

FAMILIES FEUD. Detractors say the lack of outside checks on the Singer family is responsible for Cooper's plethora of problems. The Singers, Bass, who is acting chairman during the insider-trading inquiry, and the other directors declined to comment. Cooper spokesman Charles Perkins insists that "the board takes its fiduciary responsibility very seriously, and it will be independent."

Ever since the Montgomery ouster, the Singers have been warring with an-



GARY SINGER: THE OBJECT OF AN SEC PROBE

other Cooper stockholding family, the Sturmans, their onetime allies. Both families made fortunes in suburban New York real estate decades ago, and each is now led by three brothers in their 30s. In 1989, the Singers pushed Wayne and Howard Sturman out of the company. On May 29 of this year, the board suspended Bruce as co-chairman after he had accused fellow directors of failing to address the insider-trading charges against Gary Singer. The board said it was reviewing "certain matters concerning the performance

of [Bruce's] duties." Bruce Sturman's lawyer, Brian J. Gallagher, a partner in Manhattan's Kronish, Lieb, Weiner & Hellman, says: "It's interesting that they don't specify what those 'certain matters' are."

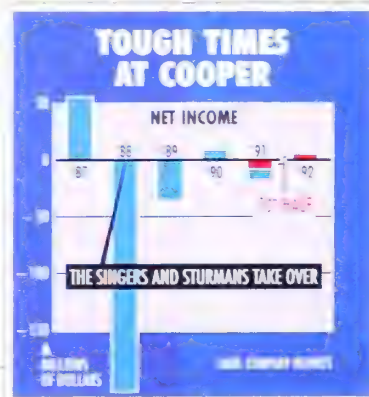
Shareholders have shown growing patience with the mess. Leading the revolt is Frederick R. Adler, a veteran dealmaker whom the Singers and Sturmans recruited as a director and who resigned last fall. Adler is stressing insider-trading allegations and the company's limping performance (chart), arguing that the Singers should be replaced by professional managers.

Nepotism and high expenses are other big shareholder gripes. As co-chairman, Gary makes \$400,000 yearly. Steven, chief operating officer, hauls down \$326,000. Brad, as head of Cooper's real estate arm, earns \$175,000 and as the company pick up his country club dues of \$19,500. Their father, Mark, got \$241,000 during the first year of the new regime, then became an unpaid consultant. In 1990, though, he exercised his right to buy shares for 10¢ each and made a \$1 million taxable gain, company records show. Feghali, the father-in-law, earns \$30,000 as a director. Various other Singer family members or friends have been on the payroll. Overhead expenses exceeded sales revenues in 1990 and came close the two prior years—in a business where overhead normally runs about one-third of revenues. The company says it has actually pared staff, from 570 in 1990 to 378 now, but is still saddled with the legal costs of shareholder suits dating from the Montgomery era.

BIG TROUBLE. The Singers are now facing an antagonist even more formidable than restive shareholders: the Securities & Exchange Commission, which is looking into the insider-trading charges. These surfaced on May 21 when Gary Griggs Jr., a former junk-bond analyst at Keystone Group Inc., a mutual fund company, and John D. Collins II, an ex-analyst at Smith Barney, Haskins Upham & Co., pleaded guilty to securities fraud. In his courtroom statement, Griggs fingered Gary Singer as their

accomplice. According to prosecutors, Griggs alerted Singer to junk bond trades Keystone planned to make.

Singer allegedly used the information to buy the bonds in advance for Cooper and his family, raking in \$3 million in profits from March 1991 to February, 1992. return. author: [unclear]



There are three standards
for measuring banks:
Moody's, S&P's and our clients'.



Today a bank's credit rating is an especially important performance standard.

So it is noteworthy that Union Bank of Switzerland stands among only a handful of banks rated Triple-A.

But our clients have come to expect more of UBS than the highest rating major credit agencies assign.

It is these expectations that have led us to conduct business on the basis of long-term relationships. Apply sound credit judgment in

innovative ways. And deploy our resources and assets to accomplish meaningful objectives for corporations, institutions and individuals, worldwide.

Union Bank of Switzerland. One Triple-A rated bank committed to standards in commercial banking, investment banking and asset management that measure up to the needs of the most important group of all. Our clients.



Finance

say, Griggs and Collins, who was a go-between, got \$700,000 in Cooper corporate funds. Gary Singer denies any illegality and hasn't been formally charged.

Insider trading isn't the Singers' only SEC problem. The feds have launched another investigation of Cooper's 1991 buy-back of \$23 million of its bonds—\$8.5 million worth held by Singer family members. Company regulatory filings say the inquiry concerns purported price manipulation "benefiting persons associated with the company and/or their respective families." It's unclear whether the Singers made a profit on the deal. Company documents say only that the "purchases were privately negotiated and executed at or slightly below prevailing market rates." The company says the SEC inquiry doesn't mean the law has indeed been broken.

MADE WHOLE? Some shareholders are upset that the Singers may have benefited from another, more recent Cooper transaction: the company's June 1 purchase of three psychiatric hospitals from Nu-Med Inc., an ailing Encino (Calif.) health care provider. As part of the deal, Nu-Med had to pay off \$21.7 million of its junk bonds, most of which are held by Cooper. Some \$3.5 million of that is

owned by Singer family members. A source close to the company says the Singers didn't make money on the deal but just wanted to be made whole because Nu-Med bonds are not very liquid. Cooper's Perkins disputes that the Nu-Med paper was an illiquid burden, saying another buyer offered to pay the Singers more for the bonds. "The board got three separate legal opinions before

Cooper is now diversifying
into psychiatric care and
real estate—two businesses
that are in the dumps

agreeing" to the bond move, he says.

Even without internecine battles and federal probes, Cooper shareholders have plenty to be angry about. Since the 1988 coup, the company has lost money in all but one year. The major weakness is Cooper's reliance on extended-wear contact lenses, which consumers are backing away from because of concerns about infection. In fairness, losses are

way down: \$19 million last year vs. \$100 million the year the Singers and Stelmans took over. And the company turned a small profit for its first two 1992 quarters. Cooper has sold off a portion of assets and used the proceeds to write down its once-horrendous debt.

Still, the question is whether the Singers' next strategic step is wise. Tapping a \$120 million cash hoard left over from the asset sales, they plan to diversify. Hence, the purchase of Nu-Med's psychiatric hospitals and the push into real estate under Brad Singer. Thus far, Cooper has bought a garden-apartment complex in Georgia. Unfortunately, both these businesses are in sad shape already. Medical insurers are restricting mental-health reimbursements. And overbuilding is keeping rents down. The company is more upbeat. Says Cooper's Perkins: "The time to get into a market is at the bottom."

Perhaps so. But before the Singers focus on long-term plans, they have to survive the strife ahead. Odds are the fight won't be good for Cooper, whose stock at 3 is down 80% from 1988. That's why the eyecare company's future is, at the very least, extremely fuzzy.

By Larry Light in New York

LOOK FOR THIS MARK!



This is the NSF Mark. Whenever you see it, you know the product that bears it has been tested and is certified as meeting the requirements of the appropriate standard or regulation.

Products which bear this NSF Mark—such as equipment for food handling and processing; equipment for home water and wastewater treatment; circulation system components for swimming pools, spas, and hot tubs; plumbing system components; drinking water additive products; and bottled water and packaged ice—have **qualified** to bear this Mark.

Responsible companies have sought out NSF International as the premier, independent, not-for-profit organization whose

programs focus on public health safety and environmental quality. They know NSF develops and maintains voluntary consensus standards for public health, operates extensive testing laboratories, inspects production facilities (on an unannounced basis), and stringently certifies those products which qualify for the right to bear the NSF Mark on a global basis.

Look for the Mark, when you find it, you'll feel good. For more information and a listing of the types of products and systems which carry the NSF Mark, write to:

NSF International
Dept. #B-6
3475 Plymouth Road
Ann Arbor, MI 48105

How To Read A Letter.

At Lexmark, we take a close look at every aspect of printing to make sure your IBM equipment delivers maximum performance.

LINK:

To avoid the missing link, use an IBM typewriter ribbon. Some of our ribbons yield up to 240% more characters than other ribbons.

LOOP:

Don't be thrown for one if your toner isn't printing all the little details properly. Our toners reproduce the elegance of your fonts to the letter.

EAR:

Our researchers tested over 7,000 miles of typewriter ribbon last year to ensure every detail is letter perfect.

COUNTER:

The white space in this character should always be free of ink. A cluttered counter is usually the mark of inferior toner or ribbon.

BOWL:

Should be black and continuous. An IBM toner by Lexmark ensures high quality printing.



At Lexmark, we take the integrity of the printed character very seriously. That's why we are constantly refining and improving our IBM® toner cartridges and typewriter ribbons to give you top performance. And a credible high yield for your dollar. You know, the reason you bought IBM equipment in the first place.

And since every printed image your company generates is a direct reflection of your company's image, shouldn't you put your best typeface forward?

To order, to find the dealer nearest you, or to receive your free catalog, call 1-800-438-2468. Ext. 10. (Canada, call 1-800-663-7662.)

Lexmark is the worldwide developer, manufacturer, and distributor of IBM personal printers, typewriters, and boards and related supplies.



IBM Supplies by

LEXMARK™

Make Your Mark

BY GENE G. MARCIAL

THE REBOUND HAS THIS CARPETMAKER LOOKING PLUSH

Until recently, the nation's carpet-makers had been, well, down on the floor as the recession flattened the housing industry. Now that the economy is showing signs of renewed life, specialty carpetmaker Carriage Industries has been on a roll. A major supplier to the big original-equipment makers of manufactured, or mobile, homes and recreational vehicles (RVs), Carriage has seen its stock fly on the Big Board—from 5 in April to 8½ on June 3.

Despite the increase, some big investors are snapping up Carriage shares, betting that the stock can move up by at least 50% more, to the 13 range. Analyst Susan Jo Perkins agrees. She explains that with the economy just starting to heat up, Carriage's growth is also just beginning to take off. "Carriage dominates a niche market that's particularly sensitive to the economy," says Perkins, who estimates that the company has 50% of the manufactured-housing market and 40% to 45% of the RV business. Perkins expects Carriage's earnings to climb more than 60% next fiscal year ending June 30, to \$1 a share from an estimated 62¢ in fiscal 1992.

'EASY TARGET.' But there's more than the earnings play that's attracting the pros to Carriage. One big money manager believes that with the consolidation going on in the carpet industry, Carriage is one good buyout candidate for the likes of Shaw Industries, the nation's largest carpetmaker, which has been on an acquisition binge. One attractive feature of Carriage: It has a higher aftertax profit margin than Shaw. Carriage makes customized carpets to suit the needs of its major customers, and it fills orders fast using a fleet of 65 tractor-trailers.

Another major investor contends that at least one big carpetmaker in Europe may be eyeing Carriage. He argues that with sales last year of \$119 million and a current market capitalization of just \$36 million, "Carriage is one undervalued piece of property that could be an easy target."

Carriage Chairman and CEO Clarence Harris, 62, who founded the company in 1969, has a vested interest in seeing the stock rise—he has a 45% stake.

CARRIAGE INDUSTRIES: AT A GALLOP



DATA: BRIDGE INFORMATION SYSTEMS INC.

Perkins believes that Harris is thinking about "an exit strategy." Says Perkins: "He could either sell the company or his stake in it." Harris says he is now ready to listen to any reasonable offer.

HINTS FROM THE CLEANUP CREW

Money manager Tim Ebright has an unusual way of scouting for winners in Atlantic City: He visits the casinos at 8 in the morning. The norm nowadays, he finds, is for these gaming places to skimp on cleanup and maintenance work. So when management has workers earnestly sprucing up the casinos bright and early, that tells him that the company has the cash to look after details—and the stock is worth looking at as an investment.

Showboat, which operates casino-hotels in Atlantic City and Las Vegas, is just such an enterprise, and that's one reason Ebright is high on its stock. Eagle Asset Management, where Ebright is a portfolio manager, owns about 2% of Showboat's stock, trading on the Big Board at 13.

Gaming shares have been cellar performers so far this year, partly because of the highly publicized financial woes of the casinos. But Showboat has managed to stay in the black in spite of the recession. While most casinos in Atlantic City, where Showboat derives 85% of its operating cash flow, are financially strapped, Showboat is flush with cash. Yet its stock is in the same boat as other gaming issues.

Ebright says that the Showboat story has yet to be "discovered" by the

big institutions. But Mark Manson, institutional analyst at Donaldson Lakin & Jenrette Securities, likes the casino and says the Street "has overlooked Showboat's stalwart performance in Atlantic City and Las Vegas during the recession and its prospects in the recovery." He also notes that the company is reducing its debt burden, and that will have a favorable impact on earnings. Manson sees its profits jumping from 53¢ a share last year to \$1.10 this year and \$1.60 in 1993. He thinks the stock will double over the next months and triple in two years.

SUCCESS HAS NEVER SMELLED SWEETER

When Perfumania went public on Dec. 19, Chairman and CEO Ilia Lakach thought it was the wrong time for the retailer to come out with a new stock offering. But he agreed, anyway, to the IPO at 8½ a share because "we were desperate for money." As the overall market surged, the initial public offering was hit, and the stock rapidly climbed 25½ by mid-March. Lakach quickly announced on Mar. 30 another stock offering of 1.5 million shares. The offering knocked the stock down to 20, and the second offering came out at 19½. Lakach was confident that the stock would stay strong.

So far, Lakach has been proven right. The stock has started to edge up again, to 21 on June 3. As "the Street gets to better understand our concept of selling designer-name fragrances such as Chanel, Calvin Klein, and I tée Lauder, at discounts ranging from 30% to 70%, support for the stock will continue, argues Lakach. He expects the number of Perfumania's stores to increase from 73 in 1991 to 103 by the end of 1992 and 150 next year. And he thinks the Street's bullish earnings estimates "are on the conservative side." Analysts figure Perfumania will earn \$1.25 to \$1.35 a share in the fiscal year ending Jan. 31, 1993, and \$1.75 to \$2.00 in fiscal 1994, vs. fiscal 1992's 60¢.

Analyst Ethel Hill of Labe & Co. says that she expects the stock to rise to 30 this year. And Patrick McCormack, an analyst at Dean Witter Reynolds, has a target of 35, although he warns that the stock is suitable only for "risk-oriented accounts."

For his part, Lakach rules out any more stock offerings this year, and says that he may split the stock if it hits 30.

STYLE.

Another reason people are switching from their imports.



©1992 GM Corp. All rights reserved. Regal is a registered trademark of GM Corp. Buckle up, America! *See your Buick dealer for terms of this limited warranty.

The 1992 Buick Regal Sedan

You can tell just by looking at it: this is no ordinary 4-door sedan.

Substantial

Regal's aerodynamic profile suggests the agility and smoothness of its 4-wheel independent DynaRide® suspension.

Its aggressive shape hints at the underlying power of an optional 3800 tuned-port-injected V6 engine, and the aggressive stopping power of available anti-lock brakes.

Lasting Beauty

To protect Regal's dynamic appearance and value, Buick's high-gloss finish is resistant to chipping and solvents. And thanks to 2-sided galvanized steel panels, Regal confidently offers a 6-year/100,000-mile anti-corrosion warranty.*

Buick Quality

You can tell just by driving it: Regal is built to the exacting standards of Buick.

No wonder people are switching to Regal. It's proof that quality never goes out of style.



BUICK

The New Symbol For Quality
In America.



NORDSTROM'S GANG OF FOUR

Can management by committee help it out of the doldrums?

Management experts have always been amazed by Nordstrom Inc. The Seattle-based fashion retailer took the department-store world by storm in the 1980s, boosting revenues from around \$600 million in 1982 to \$3.2 billion last year. Yet throughout its remarkable growth spurt, there has been no one person heading the charge. Instead, three of the founder's low-key grandsons—Bruce A., John N., and James F. Nordstrom—have run the company by committee, rotating the title of president among themselves. "They continually defy the model of what we in the management field say to do," says Jeffrey Sonnenfeld, an Emory University professor specializing in management succession and structure. "And yet they make it work."

A year ago, the Nordstroms, all in their 50s, made a management change that surprised even veteran company watchers: They promoted four nonfamily members to co-president, elevating their cousin-in-law John A. McMillan to join them as co-chairman. At the same time, they installed longtime friend and confidant Robert E. Bender as vice-chairman, rounding out what may be the most crowded top-executive suite in the history of Corporate America.

SERIOUS PROBLEMS. The co-presidents' first year in office, however, has been among the toughest in Nordstrom's 91 years. Profits fell in each of the past three quarters, culminating in a sharp 16% drop in the three months ended Apr. 30 (chart). With 52% of its square footage in economically ravaged California markets, Nordstrom's sales growth in stores open more than a year has lagged behind the inflation rate for the past two years. Mall developers' problems have slowed its ambitious plans to expand nationwide. And it faces some serious employee problems, including charges of discrimination and a lingering union lawsuit. Once a Wall Street darling, Nordstrom's stock has fallen from 53 last August to around 32 now. Even at that low level, most analysts still rate it only "hold."

Now, the co-presidents must prove they have the strength to pull Nordstrom out of its slump. While the company has succeeded by sharing top management power in the past, these four nonfamily members are confronting an ever more complex and difficult challenge. Forays into new markets will keep testing their ability to duplicate Nordstrom's service-oriented culture. Two key markets—California and the East Coast—may be the slowest to get back on track once the economy rebounds.

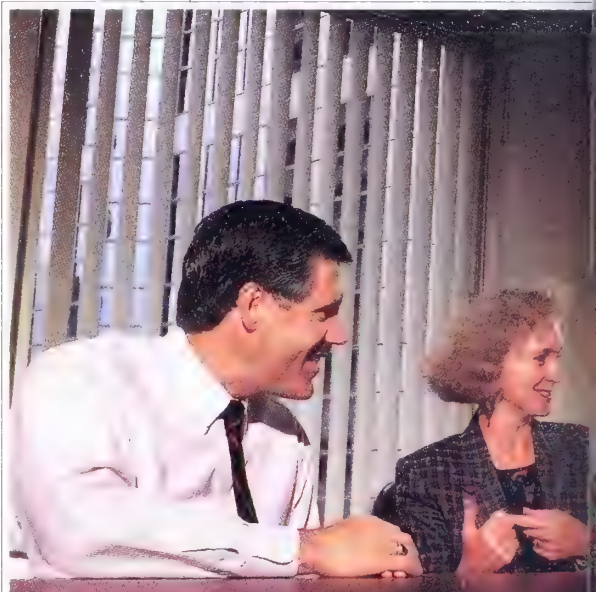
Through it all, the co-presidents must find a way to show leadership strength when there is, in fact, no single leader. Some people wonder if they can. "Having co-CEOs has to be somewhere between difficult and impossible," says Chuck Griffin, former president of the Sanger Harris chain and now a partner at Ginnie Johansen Designs in Dallas. Particularly in fast-paced businesses such as fashion, democracy can lead to corporate paralysis. "Somebody has to take responsibility for ultimate decisions," says Harry Bernard, publisher of the *Colton Bernard Newsletter*, which tracks the retail industry.

Yet Nordstrom isn't the only retailer to try sharing power. Dayton Hudson, Dillard, and now Macy's all manage at least part of their business by committee. "Corporate America is moving away from single, all-powerful chief executives," contends University of Southern California business professor James

O'Toole, whose Leadership Institute is researching the power-sharing concept. "One person can't have all the wisdom," he says.

At Nordstrom, each of the co-presidents concentrates on a different part of the business (table). They are as different as its folksy co-chairmen are similar. Raymond A. Johnson, 50, is an easygoing former farm boy who started Nordstrom in personnel. Darrel Hume, 44, is a stylish dresser who began his career selling shirts and ties while still attending college. Galen Jeffers, 42, a tiny former ski bum, worked his way up from Nordstrom's mail-order department and later through its women's fashions departments. John J. Whitacre, 39, a 6-foot, 6-inch former University of Washington football star, began in the shoe department.

But on company matters, they speak with one voice, answering questions the careful, protective way that typi-



SHARING THE BURDEN

JOHN J. WHITACRE
Shoes, restaurants,
budgeting

GALEN JEFFERSON
Women's wear,
merchandise
systems

Nordstrom's understated, press-resistant style. That's because they all "grew together—starting their careers at Nordstrom in their mid-20s and working their way up. "We've spent a good part of our lives entwined with the family," says Whitacre.

While the Nordstrom family co-chairmen still control the company's strategy,

tion, focusing on site selection and expansion into the East and Midwest, have relinquished all day-to-day responsibilities to the presidents. Operating out of the chairman's old offices on the sixth floor of the downtown Seattle office, the presidents meet formally once a week—though they communicate informally while rubbing elbows in the hall.

THE TROOPS. The key to this unusual structure is the company's highly decentralized structure. All along, Nordstrom has delegated much authority out to the far-flung regional managers, enabling store buyers and regional managers to make many decisions on the spot. This sharply reduces the number of decisions that must be made by committee. "The beauty is, we don't have a bottleneck at the top," says Hume. But there's more to its success than that. An intense corporate culture, reinforced by big commissions for salespeople and a long tradition of promoting from within, breeds loyalty among the troops. The result is that some employees tend to work as hard as if the

strongly held minority view. "Heck, nobody gets along perfectly," says Bruce Nordstrom. "But what we have is respect for one another. We have a system where one guy can veto anything." Hume says the executives "leave our egos at the doorstep."

The Nordstrom co-chairmen—known within the company as Mr. Bruce, Mr. John, and Mr. Jim—insist they grant the co-presidents plenty of autonomy. For instance, one region wanted to try having its shoe buyers spend more time away from the selling floor—a sharp break with the company's policy of keeping buyers in close contact with customers. Bruce Nordstrom says he objected, but the chairmen let the experiment proceed anyway. "They've made it very clear to us that they don't want to stifle our efforts," says Hume. "It's the foundation of our culture to allow entrepreneurship."

With many projects, the co-presidents don't even consult the chairmen—or one another. Last year, co-President Johnson was hearing that customers were frustrated with the quality and price of brand-name children's wear. So, he followed a lower-level manager's suggestion and doubled its offerings of private-label children's wear, under the label "Baby N." Since this is one of his merchandising areas, Johnson made the decision himself, merely informing his co-presidents once he had done it.

Now that the company has grown to 69 stores, it faces problems the older generation never dreamed of. Its employees' union, decertified last July after a bitter fight, is suing for what it claims are millions in unpaid overtime wages. The union asserted that employees should have been paid for spending their own time on those thank-you notes and other little Nordstrom touches. The company is also grappling with charges of racism. A group of black former and current employees in April filed a class action alleging discrimination, and activists have

taken to picketing its stores.

Nordstrom denies discriminating, and says its employment of blacks exceeds their share of the labor market in each region. It claims the complaints are based on personal vendettas. To counter the bad publicity, Nordstrom has made a point of trumpeting its latest donations to

minority causes and has begun running more ads in black-owned newspapers.

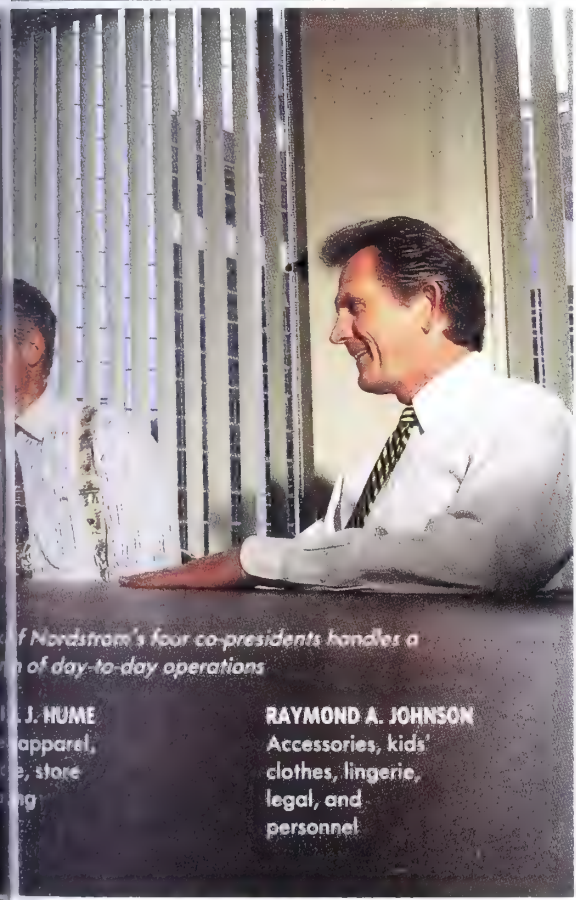
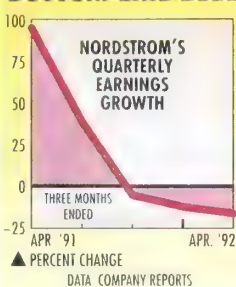
ALLURING SHOPPERS. But for the moment, the presidents' most important task is getting shoppers to open their wallets again. Responding to fierce price-cutting and consolidation in the retail industry, the executives have begun easing Nordstrom's upscale image by offering more lower-priced merchandise. It's a delicate balance: The company wants to keep its reputation for high-quality goods and top-notch service. And it doesn't want to further erode its profit margins, which fell from 5.3% in 1989 to 4.3% last year. So, it's selling more of its own private-label shoes and clothing, computerizing inventory control, refocusing advertising on value-priced merchandise, and even studying the notion of opening discount outlets, in addition to the 16 clearance stores it operates now.

While sales in existing stores are still sluggish, there are some bright spots. Overall revenues jumped 10% last year on the strength of new stores in Chicago, New Jersey, and Maryland. This year, Nordstrom is opening stores in Baltimore and Silver Spring, Md., Freehold, N.J., and Minneapolis' huge Mall of America. The company's balance sheet remains strong, with debt equaling 40% of capital, and its sales per square foot, at \$388, are double the department-store average. Its 1991 return on equity, 14.5%, was second-highest in the department-store industry after May Department Stores Co., according to retailing industry consultants Kurt Salmon & Associates. "Until the price-cutting stops, it's going to be a tough operating environment," says Nancy Zevenbergen, a Seattle money manager. "But in the long term, they will be the survivor."

A fourth generation of Nordstroms is counting on it. Seven members of that group are working their way up through the ranks, and four are already managing major regions. The oldest, Blake, is 31. In the family tradition, each started out waiting on customers. "They all aspire to be at the head of this company, and in time they will," says Hume. But until that day, he and his fellow co-presidents will have plenty of challenges to keep them busy.

By Dori Jones Yang in Seattle

BOTTOM-LINE BLUES



of Nordstrom's four co-presidents handles a day-to-day operations

J. HUME
apparel,
store
ing

RAYMOND A. JOHNSON
Accessories, kids'
clothes, lingerie,
legal, and
personnel

had their own name over the door. trademarks include personal you notes to customers. the co-chairmen, the presidents plenty of spirited, candid debate, ay. They contend that they resolve disagreements by focusing on would be best for the customer. they make a point of respecting a

unpaid overtime wages. The union asserted that employees should have been paid for spending their own time on those thank-you notes and other little Nordstrom touches. The company is also grappling with charges of racism. A group of black former and current employees in April filed a class action alleging discrimination, and activists have

SUDDENLY, TYCO IS PLAYING WITH THE BIG KIDS

A slew of savvy acquisitions could turn it into the No. 3 toymaker

In an industry known for flamboyant characters, Richard E. Grey stands out as rather, well, colorless. He dresses like a banker. And there's not a single Big Bird or View-Master game to be found in his sparse office. But the chief executive of Tyco Toys Inc. figures there's no sense in pretending to be someone he's not. "Bluff and Bluster both went out of business," he says. "We'd rather have results."

He has had no shortage of those. In six years, Grey and Chief Financial Officer Harry J. Pearce have done what few people in the toy industry thought possible. They have built the Mount Laurel (N.J.) company from a tiny electric racing-car manufacturer, ranked No. 22 in U.S. toy sales, to one of the nation's largest toymakers. And they did it without a single "mega-hit," such as a Cabbage Patch Kids doll. Until recently, however, few investors were singing Tyco's praises. One important reason: Its board was dominated by New York investor Benson A. Selzer and his family, who at times seemed more interested in diversifying than building a toy company.

CLIMBING. But with Selzer out of the picture since last summer, Grey and Pearce have moved Tyco into high gear. They got it a listing on the New York Stock Exchange, announced its first dividend, and delivered a 2-for-1 stock split. Its shares have more than doubled, to around 45 (chart).

Now, with its two latest acquisitions, Ilco Toy Co. and Universal Matchbox Group Ltd., Tyco will climb into third place, behind Mattel and Hasbro, with estimated 1992 sales of \$800 million.

Tyco's strategy is to continue broadening its product lines while expanding in fast-growing international markets. To keep from being overwhelmed by growth, it uses a lean approach—eliminating excess staff, inventory, and warehouses when it acquires a company.

Ilco, which cost an estimated \$50 million, marks Tyco's first foray into the preschool market. The little-known New York company has the license to several Sesame Street toys. It also represents Tyco's latest thrust into the lucrative direct-

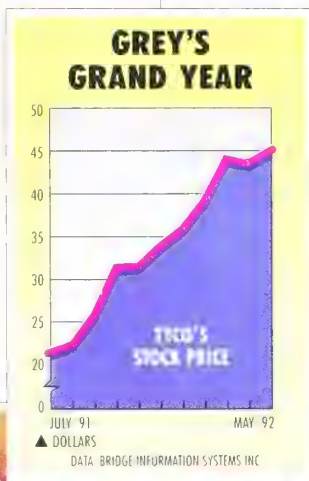
import market, which makes up about 75% of all U.S. toy sales. Direct-import companies make and sell lower-priced, unadvertised toys directly to retailers.

Another recent acquisition looks pretty good at first blush: Tyco is shelling \$135 million, or 68% over market value, to buy Matchbox. But it could turn out to be a shrewd bargain. Tyco is building not only a well-regarded line of die-cast toy cars but also Matchbox' international distribution network. Matchbox sells its cars and other toys in 120 countries, many of which Tyco has never been before. Although Tyco's international sales have more than doubled since 1986 and now account for 14% of total revenues, it still lags behind its rivals in this area. Most get from 40% to 50% of total sales outside the U.S. With new subsidiaries in Spain, Italy, Germany, Canada and the Benelux nations this year, Tyco's sales abroad may top \$213 million or more than 25% of total sales, in 1992.

PIGGING OUT? Not everyone is so sanguine, though. James E. Morehouse, a consultant who specializes in international distribution at A.T. Kearney, says Tyco may be surprised by how expensive and time-consuming it is to run Matchbox' "incredibly far-flung organization" with its own. Morehouse cites problems in everything from back-office systems to sales training and discount structures. Hasbro Inc. Chairman Alan G. Hassenfeld is characteristically direct. "Pigs are being led to slaughter," he says. "They've put a lot on their plates, and now they've got to make it happen."

In addition, Tyco's large purchases will pile up debt up to around \$100 million of capital. Grey says, "we have given that consideration."

Neither Grey, 47, nor Pearce, 47, is a newcomer to acquisitions. Their 1989 purchase of View-Master Group Inc. was widely considered an industry coup in which Ideal's line of View-Master and such toys as Super Doh, a Doh knockoff, helped Tyco diversify. Time Products was bought in 1990, a big step for Tyco in the direct-import business, which now counts for 9% of sales. Today, the



PLAYTIME: WHAT GREY AND PEARCE REALLY ENJOY IS A ROUND OF RAPID EXPANSION



INTRODUCING THE PALM PHONE. THE ULTRA-THIN CELLULAR FROM PANASONIC.

Panasonic introduces the
Palm Phone™ Cellular Phone.
**It will keep you in touch
with the world from the palm
of your hand.**

Introducing a cellular phone that can stay by your side through thick and thin. It's easy to carry and easy to use. The new Palm Phone from Panasonic.

While the Palm Phone may be less than a handful, you can say more than a mouthful about its unique design and sophisticated features. The Palm Phone folds up to take up hardly any room. Folded it's less than one inch thick. And just under 10 ounces. Yet despite its small size, it has an extra large backlit ELD (Electronic Luminescent Display) screen. Its alpha-numeric memory can store 200 numbers. And its rechargeable battery lets you talk for a long time—up to 55 minutes.

So, if you're looking for an ultra-thin cellular phone, hold out for the one that fits in the palm of your hand. To speak to the Panasonic Palm Phone dealer nearest you, call **1-800-365-1515, ext. 444.** ■



Panasonic
just slightly ahead of our time.®

IS YOUR CD MATURING?

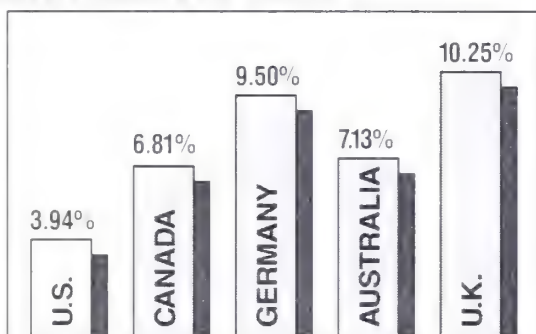
No Sales
Charge

How to Take Advantage of High Global Yields

Fidelity Short-Term World Income Fund

High Yields From Around The World

Fidelity Short-Term World Income Fund offers investors an opportunity to enjoy the significantly higher yields currently available from many short-term international securities. That's good news if you're investing for income.



Today, short-term rates in many foreign countries are higher than in the U.S. This chart compares three-month Eurodeposit CD rates as of 4/10/92. Rates are not intended to reflect the yield or investments of the Fund. Source: Reuters.

Managed For High Stability

The Fund pursues a high level of price stability by investing primarily in short-term securities and using hedging techniques to help reduce the impact of changing currency rates. Of course, the Fund's share price, yield and return will vary, and you may have a gain or loss when you sell shares.

Fidelity Makes It Easy To Invest

You can even use the proceeds from your maturing CD to open an account.¹ And, it's easy to open an IRA or transfer an existing one. Just call us and we'll assist you. Minimum investment: \$2,500, plus free checkwriting.

Visit Your Local Investor Center or Call 24 Hours

1-800-544-8888

Fidelity Investments



CODE: BW SWI 061592

For more complete information, including management fees and expenses, call today for a free prospectus. Read it carefully before you invest or send money. ¹Unlike many CDs, the Fund is not FDIC-insured. Fidelity Investments Corporation, 82 Devonshire Street, Boston, MA 02109.

pany has the lead in radio-controlled hicles, electric-car racing, drawing to such as Magna Doodle, and 3-D views such as View-Master. Other hits include Little Mermaid dolls, Incredible Cray Dummies figurines, and Magic Copier toy copy machine.

Such breadth of product is important. Lewis Galoob Toys' revenues fell less than 50% the year kids tired of its Mr. Machines. Kenner Products Inc.'s revenues fell 35% in 1990 when sales of Ghostbuster toys slumped, says John Taylor, toy-industry analyst with L. Alton & Co. in San Francisco. "Most companies have gotten burned" on single-product strategies, he notes.

'SELF-SERVING.' Tyco, a former unit of Sara Lee Corp. that was bought by Selzer-led group in 1981, has never had that kind of sales drop-off. But it has plenty of turmoil in the years after Selzer took it public in 1986. Grey members sitting in quiet frustration, stomach churning, while the Selzer board discussed taking Tyco into businesses that he felt were wrong for "Not everything they did was terrible," Grey demurs. "But a couple of things were absolutely self-serving," John Selzer, son of Benson and one of five Selzer associates then on the six-person board, doesn't dispute that there were transactions involving Selzer associates. But he says they all benefited Tyco.

One deal that came under fire from investors was Nasta Toy Co., which Tyco bought in 1987. The next year, Selzers had Nasta buy an interest in Olympic Mills, a struggling Puerto Rican underwear maker indirectly controlled by the Selzers. When Tyco shareholders howled, Nasta sold the Olympic Mills stake. Still, Nasta had its own serious problems. With sales of its toy radios and musical instruments plunging, it dragged down Tyco's earnings in 1990 by more than \$12 million. It has since been folded into Playtime.

After that scare, Grey and Pearce talked the Tyco board into appointing two more outsiders. "Basically, we convinced everyone that their value would continue to be hurt unless something was done to change the status quo," explains Pearce. By mid-1991, the 41-year-old Selzer and his family were agreed to sell their 9% stake.

Grey doesn't miss them, but he's the type to gloat. Even at this year's annual meeting, with lots of good news to report, the CEO was his usual serious self. The only time he lost his cool was when he introduced Tyco's hot new child. Uttering its name, "Magic Baby Pottery," he cracked a sheepish smile—and then got right back to business.

By Laurel Touby in Mount Laurel, N.J.

BUSINESS WEEK ANNOUNCES

THE 1992 BUSINESS WEEK
HEALTH CARE SUMMIT

Business and the Future of American Health Care

*An exclusive national summit
for those most challenged by today's imperative
to rethink and reform health care.*

*Here, all the key constituencies of the corporate
and national health care debate will meet to consider
new options and to cast bold solutions.*

AMONG THE PARTICIPATING SPEAKERS ARE

FROM GOVERNMENT: Hon. Michael Dukakis, whose health care achievements as Massachusetts governor won national attention.

FROM MANAGED CARE: Dr. David M. Lawrence, CEO, Kaiser Permanente, the largest managed care provider.

FROM PRIVATE INSURERS: Dr. Carl J. Schram, President, Health Insurance Association of America.

FROM CORPORATE AMERICA: William Goss of GE, Burke Huey of PepsiCo, and other executives whose inter-

corporate health care alliances and innovative cost control approaches are working.

FROM POLICY RESEARCH: Dr. David Himmelstein, Harvard Medical School; the nation's #1 authority on health care administrative costs.

Dr. Uwe E. Reinhardt, Princeton University; the nation's most renowned analyst of health care delivery.

FROM PUBLIC ADVOCACY: Dr. Sidney M. Wolfe, who, with Ralph Nader, created the Public Citizen Health Research Group to advocate universal health care access.

*An unparalleled opportunity for corporate and
health care leaders to advance toward pragmatic solutions and
shape an agenda for the recovery of US health care.*

October 20-21, 1992 / The Willard Hotel, Washington DC

Invitations are limited exclusively to senior management.

All executives attend as the guests of Business Week.

For information, call Business Week (212) 512-2184 Fax: (212) 512-6281

BusinessWeek

THE NEW REALISM IN OFFICE SYSTEMS

COMPUTERS CAN'T TAKE THE PLACE OF GOOD MANAGEMENT—BUT THEY CAN HE

When it comes to information technology, you won't find greater enthusiasts than executives of United Parcel Service Inc. With the fervor of converts, they rhapsodize about their five mainframe computers, 2.4 trillion bytes of data, their worldwide network, their computer-controlled conveyor belts whirring along at 500 feet per minute. The man with the plan, Chairman and Chief Executive Kent "Oz" Nelson, says there's a good reason to be bullish on all this technology: "We realized that the leader in information management will be the leader in international package distribution—period."

It wasn't always like this. For most of

the 1980s, UPS was a dull, brown dinosaur that couldn't match Federal Express Corp. in technology and wasn't sure it should. While UPS experimented with every gizmo imaginable, its manual package handling was so efficient that "every time we applied technology, it slowed us down," Nelson recalls.

BIG SPENDERS. UPS was not alone. At many companies, information technology became a source of exasperation. Management consultants and computer makers told them they needed "strategic" information systems to gain a competitive edge. A new breed of computer managers, known as chief information officers, emerged, pushing technology

as the preeminent business weapon. Search began for "killer apps," ingenious computer applications such as I Ex' package-tracking system, Me Lynch's Cash Management Account, Citibank's automated-teller machine work, and the granddaddy of them all, American Airlines' Sabre reservation system. Consultants noted that by late 1980s, Sabre generated nearly \$100 million annually for parent AMR Corp.

The corporate coffers sprang open. Budgets for information technology rose from 27.2% of corporate capital spending in 1980 to 35.2% by 1991, estimates Morgan Stanley & Co. economist Stephen Roach. In just the service sector of



economy—banks, insurers, ho-
he estimates that \$862 billion was
ed into information technology in
0 years ending in 1991.

t guess what? Most of the invest-
s never paid off on the bottom line.
e-collar productivity actually del-
d for most of the 1980s. Few killer
ever emerged, and many ambitious
ets collapsed under their own
t. The result: Many CEOs feel se-
l and abandoned by information
ology. With the economy sputter-
and corporate profits under pres-
they're putting a lid on computer
ets. Many are actually out-
ing—turning over management or
ownership of their information sys-
t outside professionals.

t now, more than ever, Corporate
ica needs information technology
works. It needs sys-
that can help
loser to

customers, create new products and ser-
vices, and meet global competition. As
companies shrink their payrolls, personal
computers, networks, fax machines, and
other information tools really do have to
improve productivity. Technology must
help fewer hands get the work done.

There are already signs that informa-
tion technology is starting to make a
difference. Since 1989, white-collar
productivity has begun to rebound
(chart, page 130), partly because of
thinning ranks. Roach says that as the
'90s wear on, productivity will continue
to rise as corporations finally figure
out how to apply information technology
effectively.

How will they do it? The answer is
deceptively simple: by taking a far more
realistic approach. In the sober '90s, the
vain hunt for killer apps has ended. In-
stead, smart CEOs are

stepping back and examining just what
it is their companies do and how their
business processes can be changed to do
it better. Only after they have clearly
defined the task do they call in technol-
ogy experts to rig information systems
to help get it done.

'LIKE AIR.' The process is called "re-engi-
neering," and it's how UPS's Nelson fi-
nally learned to love technology. Once
he understood that the basic UPS system
had to be redesigned—to compete with
the likes of Federal Express rather than
with the plodding U.S. Postal Service—
it was easy to see which technologies
would really pay off. That led to a de-
cade of heavy but focused investment in
everything from a new freight airline to
development of a custom handheld com-
puter that electronically captures cus-
tomers' signatures. Thanks largely to its
new capabilities, UPS's profits and reve-
nue are rising (page 132).

The painful lesson of the 1980s is that
even the sexiest technology isn't a
substitute for clearheaded man-
agement. Information tech-
nology will be an impor-
tant discipline for
senior executives to
master, but only
one of many,

WHERE'S THAT BOX? When a United Parcel Service package went astray,
finding out who signed for it used to mean rummaging through paper receipts.
Now customers sign on a handheld computer. Once a day, drivers transmit
the signatures to Mahwah, N.J., where they can be viewed the next day

THINK SMART: MAKING TECHNOLOGY WORK

ATT

Improve customer service
ing check-in lines
let guests check in by phone
Hyatt needed a toll-free
center, data links to every
l, and identical software in
so operators wouldn't
arn multiple systems

ochem
ro

Build wider internal
re-engineering
ackle a common
e—long waits for
account reimbursements
ing sales people file forms
lly, paying balances into
osit accounts, and auditing
work afterward

WAL*MART

Challenge: Overcome cost advantages in
purchasing and distribution that larger
rival Kmart had in the early 1980s

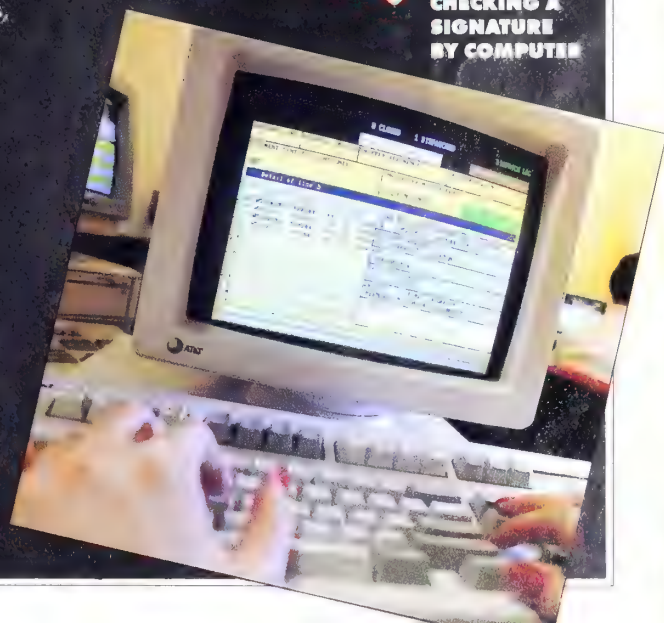
Solution: Use computer networks to
establish tight links between suppliers,
warehouses, and stores. That way,
Wal-Mart avoids excess inventories
and keeps costs down



Challenge: Track transactions at
stores around the world to reduce
fraud. The ultimate solution, giving
each a unique ID number, would
have taken six years

Solution: Don't do it. The new track-
ing system was already such a big
improvement, it shouldn't
be delayed

**CHECKING A
SIGNATURE
BY COMPUTER**





RADUCHEL: EVEN SUN HAD INCOMPATIBLE SYSTEMS

alongside marketing, finance, and product development. "At good companies, information systems technology is like air," says consultant Peter G. W. Keen, executive director of the International Center for Information Technologies in Washington. "They hardly talk about it. It's just there."

Even the CIOs are singing a different tune. Back in 1989, top computer systems managers surveyed by CSC Index, the consulting arm of systems integrator Computer Sciences Corp., said their No. 1 priority was using information systems for "competitive breakthroughs." This year, that ambitious goal has fallen to No. 14. The top priority now is more modest: "aligning information systems [with] corporate goals."

That's certainly what the techies at Wal-Mart Stores Inc. have done. A decade ago, the Bentonville (Ark.) chain trailed Kmart in the discount-store mar-

ket. With its greater purchasing power, Kmart could negotiate lower wholesale prices. But Wal-Mart saw a way for information systems to blunt Kmart's edge. By collecting and analyzing sales data from stores daily, Wal-Mart could immediately learn what merchandise was moving slowly and thus avoid overstocking and deep discounting.

SPECIAL TREATMENT. Wal-Mart executives understood early that while hot products come and go, a good delivery system is a joy forever. At its computerized warehouses, many goods enter at one loading dock and leave from another without ever resting on a shelf. And Wal-Mart wins special treatment from its suppliers because it gives them special treatment: Some 3,800 vendors now get daily sales data directly from Wal-Mart stores. And 1,500 have the same decision and analysis software that Wal-Mart's own buyers use to check how a

product performs in various markets.

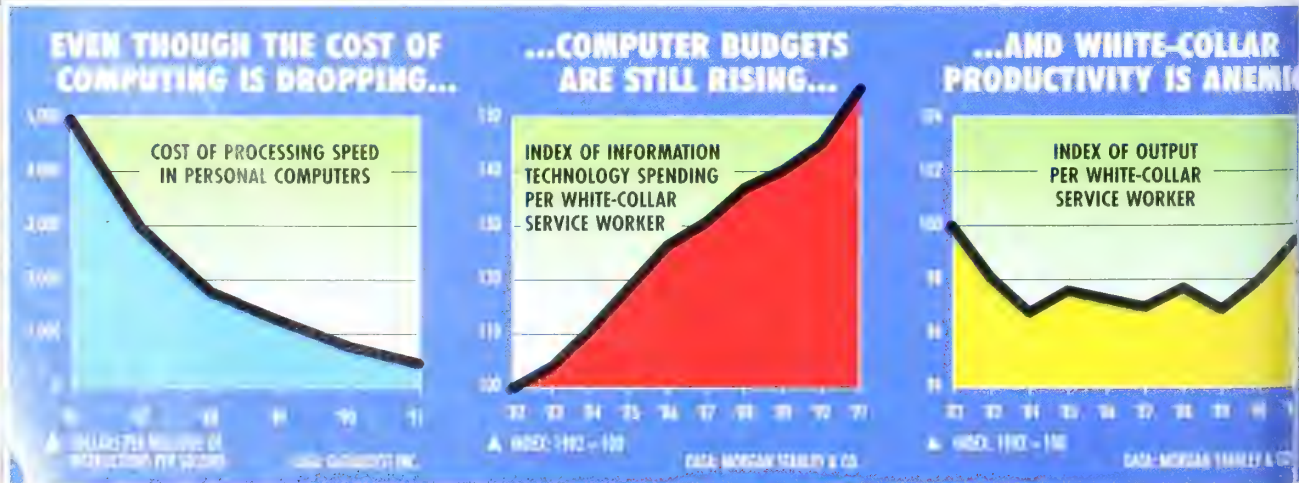
In all, Wal-Mart has invested \$600 million over the past five years in computers, satellite dishes, and other hardware and software it uses to orchestrate supply and demand. And the way, it has become the world's largest and most profitable retailer.

Wal-Mart's success shows how important it is to get the strategy right before laying out the information technology. But being smart about technology itself is equally important. Take Hyatt Corp. Like other chains, it has a computerized reservation system, but Hyatt has a technological advantage: Guests can check in any Hyatt in the U.S. by calling a toll-free number.

Omaha where an operator starts a assigns a room, and even describes view. On arrival, guests just pre their credit cards for verification pick up the keys.

That's not done easily. By the end of the year, all Hyatt hotels will have expensive, 24-hour data hookups to the Omaha center. And all will have the same on-premises software, so the Omaha operators can check guests in by remote control without having to navigate different systems at each hotel. Because Hyatt manages all its hotels, it can force those standards without worrying about balky franchisees.

The payoff: Guests spend less time in the check-out line, a point Hyatt trumpets in its advertising. And according to Gordon S. Hyatt, Hyatt's senior vice-president for management information systems, the new network eventually will be used to centralize such functions as accounting.



are now done at each hotel. That produce savings of tens of millions of dollars. Says Kerr: "You can't make a room 200 miles away, but you can do other things."

Computer makers are taking a levelheaded approach to using information technology these days. Sun Systems Inc., the leading workstation maker, was a true believer in technology. As it grew from a startup \$2.5 billion company from 1982 to the need for new systems and software was questioned, and there was little coordination of purchasing. A couple of years ago, management was alarmed that the systems couldn't

communicate one another—an embarrassing plight for the world's pre-networking company. Even today, after years of enforcement, says William J. Hel, vice-president of corporate planning and development, "my architecture is a bit of noodles thrown in the air."

IT-ALLS. Bit by bit, Sun is unifying its electronic systems. Now, when an employee wants a workstation, Sun goes to its Japanese subsidiary, it's entered the computer once delayed to other issues that need to be about it, instead of entering up to issues on different, compatible systems.

Now, Sun is going from low-tech offices in 11 countries to a single plant in Montfort, the Netherlands, that is linked to sales offices in the 11 countries and to a Sun factory in Linlithgow, Scotland.

Strengthened communications networks save time and cut down on the inventory. That's what Sun works down its manufacturing time to six months from eight, says \$500 million in cash on its balance sheet, says Raduchel. "There are no grand strategies here, it's nuts-and-bolts stuff," he says. "You just have to go and work with every single day."

One of the toughest challenges for managers is dealing with the great masses of white-collar workers. A white-collar person thinks of a professional and they know it's like getting a group of doctors

to agree on something," says Thomas M. Hout, a vice-president at Boston Consulting Group. Gaining their support early is essential, says Jerrold J. Eisen, a consultant at Goldstein Golub Kessler & Co., a New York accounting firm. Otherwise, "they sit there in the bushes with the guns loaded, waiting to shoot."

Case in point: the insurance industry. It's an intensely white-collar business, and insurers have been among the biggest buyers of information technology. Yet the insurance industry racked up one of the worst productivity records in the 1980s. According to Morgan Stanley's Roach, despite doubling investment

versions. Cigna's bosses are insisting on fundamental change: Caron says that heads of one unit, skittish about wholesale changes, asked the re-engineering team to estimate the cost and impact of making just 75% of the proposed changes. But the re-engineering team refused, insisting on all or nothing. At Cigna RE, the reinsurance unit, a re-engineering effort slashed the 225-person payroll nearly in half while speeding document handling.

SELF-SERVICE. Bureaucratic infighting can tangle up even the best information-technology plans. Take the Texas Employment Commission. It spent 12 years

on a new system for state unemployment taxes. The tax collectors blamed data-processing people for taking too long, while the computer jocks complained that the tax collectors constantly asked for new things. In 1990, the commission brought in Andersen Consulting, which helped create a dispute-settling steering committee that included the commission's chairman, administrator, and the top managers from both sides. The panel ended one long-simmering dispute by ordering tax collectors to swallow their pride and enter certain tax-status changes into the computer themselves instead of sending slips of paper to clerks. That should save money and time. Back on track, the tax system will go into

SECRETS OF SUCCESSFUL INFORMATION-TECHNOLOGY PROJECTS

DO

▶ Agree on goals, after first hashing out a model of how your company works

▶ Ask stupid questions about how things are done

▶ Postpone automation until processes are redesigned

▶ Start by fixing a small but annoying problem to win friends

▶ Structure big projects so there are visible payoffs along the way

▶ Try out rough prototypes of new systems to get early feedback from the people who will use them

▶ Select your best people for project teams, even if it disrupts your day-to-day operations

▶ Settle for 80% solutions

DON'T

▶ Set vague objectives such as 'improving productivity'

▶ Design your project to minimize conflict within the organization

▶ Assign project management to someone who's technically proficient but unskilled in negotiation

▶ Assume that interviewing computer users will reveal exactly what they need from the new system

▶ Start your effort by looking for places to apply the hottest new information technologies

▶ Leave technology for last, or you'll overlook opportunities for using it

▶ Emphasize incremental improvement if what you really need is fundamental change

in computer systems, communications, and other office technologies as a share of its capital stock, the industry still has nearly 47% of its work force pushing paper in back offices, scarcely down from 49% a decade ago.

One reason for insurance's lousy performance is that old processes were never killed off when new automated methods were introduced, says Ray Caron, president of Cigna Systems Corp., the computer unit of Philadelphia-based insurer Cigna Corp. "You started to layer systems on top of one another," he says. "For example, the independent agents would do some work, and our people would do it over again, just to be sure they did it right."

Now, Cigna is starting to get things right with such methods as prototyping, in which rough drafts of new software are tried out with real employees before money is sunk into industrial-strength

operation on Oct. 1.

At the extreme, a poorly managed computer project can threaten a company's life. Consider Blue Cross & Blue Shield of Massachusetts. Two years ago, the health insurer faced shrinking membership, rising health care costs, and a lid on rate increases. On top of that, an ambitious computer system, years late, was millions over budget because of inadequate supervision and constant requests for modifications. That contributed to a financial crisis that briefly drove the company to the brink of insolvency. Early this year, Blue Cross withdrew life support from the computer project and turned over its data center to General Motors Corp.'s Electronic Data Systems Corp. (page 133).

Even the military can't simply order its troops to embrace new information systems. "Many of the procedures have existed for decades. You have people

UPS: UP FROM THE STONE AGE

NELSON: A BIG INTERNAL SALES JOB



Considering the mistakes United Parcel Service Inc. faced, it's easy to see why so many companies fail at re-engineering. At UPS, the decade-long transformation from a low-tech outfit to an effective user of information technology required heavy spending, endless patience, and—above all—a giant internal sales job.

In the early 1980s, most UPS employees were in no mood to dabble in technology. The 3,000-strong industrial engineering department had so perfected manual package handling that UPS had the industry's lowest costs. Sure, Federal Express Corp. had wireless terminals for its couriers. But to UPS management, those were bells and whistles. After all, UPS profits kept setting records.

NO TECHIE. But customers kept getting choosier, rivals stronger, and computers cheaper. By 1983, it dawned on management that it could no longer keep ahead by tweaking manual processes. Kent C. "Oz" Nelson, then senior vice-president, created a task force to plot an information-technology strategy. Although no techie—he has a BS in business from Ball State University—Nelson knew that computer-based systems would someday identify, route, and track packages better than any human being.

With deep pockets and patient employee shareholders, UPS went on a spending spree: \$50 million for a global data network; \$100 million for a data center in Mahwah, N.J.; and \$350 million for the Delivery Information Acquisition Device (DIAD), a handheld computer for drivers. It's also spend-

ing \$150 million on a cellular data net and creating a machine-readable label that holds more data than bar codes.

The biggest challenges have been managerial. Gene Hughes, strategic planning manager, says that some managers feared that technology would be inflexible, expensive, and prone to failure. Instead of quashing dissent, the company diffused it by picking respected managers and sending them to school to learn technology. That turned them from bashers into boosters. Nelson says that forming a priority-setting steering committee made up of the No. 1 or No. 2 person from each department was "one of the best decisions we made."

There were mistakes, too. Nelson, chairman and CEO since 1989, says at first the company focused too much on hardware and too little on what customers wanted. FedEx, for instance, was devising systems to automate customer mailrooms. UPS also goofed by not leaving enough people behind to fine-tune newly installed projects, and by ignoring off-the-shelf technology.

The costs of automation and overseas expansion crimped profits in the late 1980s, but UPS earnings are rebounding—up 15% in 1991, to \$705 million, on a 10% revenue gain to \$15 billion. At FedEx, Alan B. Graf Jr., chief financial officer, says: "Long-term, it's Federal Express vs. UPS. They're tough competitors." You can bet FedEx would not be so respectful if UPS were still treating computers and communications as so many bells and whistles.

By Peter Coy in New York, with Chuck Hawkins in Atlanta

Special Report

who 'own' processes," says Deputy Assistant Defense Secretary Paul Strassman. And thanks to military employment rules, "if I have a colonel in charge of logistics, I can't take him to the parking lot and fire him." Strassman, a former Xerox Corp. executive, relies on the power of a clearly explained idea to rally support.

As CIO for the world's largest computer user, Strassman faces an aggressive deadline: He has orders to cut \$36 billion in spending between fiscal years 1996 and 1997. By consolidating data centers, the Defense Dept. is not only saving money but also eliminating discrepancies in data that cropped up through duplication. And the Pentagon is creating information "utility" that will sell data processing for a fee to internal users. "If we do not succeed with re-engineering, we will have to take on more fighter planes, more ships, more tanks," Strassman warns.

BREEDING 'ZEALOTS.' If the problem is people, not technology, what's the solution? Before upsetting a lot of zealots, it's often wise to tackle a small project that shows how computers really can help. Solve the annoying, obvious problems first, even if they have little effect on the bottom line, suggests Robert M. Rubin, vice-president for information services at Elf Atochem North America, a Philadelphia-based chemical manufacturer. Rubin is working on a system that will reimburse salespeople for expense accounts right away, instead of checking their math and receipts later. It should win him some credibility for future initiatives that could demand sacrifices from employees.

Sometimes the winning strategy is to forget about the state of the art and settle for what can be completed. MasterCard International Inc. is in the middle of a five-year, \$65 million effort to upgrade its worldwide network. A key goal is to slash losses from fraud by giving issuing banks more up-to-date information on cardholders and merchants. To do that, Philip Verdi, executive vice president for operations, hoped to assign a unique ID number to each of 9.6 million merchants in the world. That way MasterCard could follow them even if they switched banks, making it easier to identify a store that had high losses from fraud. But getting some 3,000 banks to agree on a worldwide numbering scheme and integrating the data base would have taken an estimated six years.

This April, Verdi decided to skip the cumbersome feature so the company could move ahead. By the end of the year, MasterCard will be giving merchants reports of suspicious activity within hours—say, usage of a card mo-

imes in a day. Within about two
MasterCard hopes to have that
available almost instantly, so a
could be foiled on the very day he
the card. With fraud losses topping
llion a year worldwide, Master-
banks don't want anything to de-
se capabilities. "You've got to de-
something. You've got to make
taste it," says Verdi. "Then they
zealots, and they really help you
the job done."

ther approach is to break the big
auls into manageable pieces. Says
oil Co. CIO R. Britton Mayo: "One
rules on projects is if we can't do
ine months, we don't do it." Mayo
eave himself room to fudge: Some
ts do take more than nine months,
e just divided into shorter phases.
ists, though, that each phase pro-
some tangible benefits.

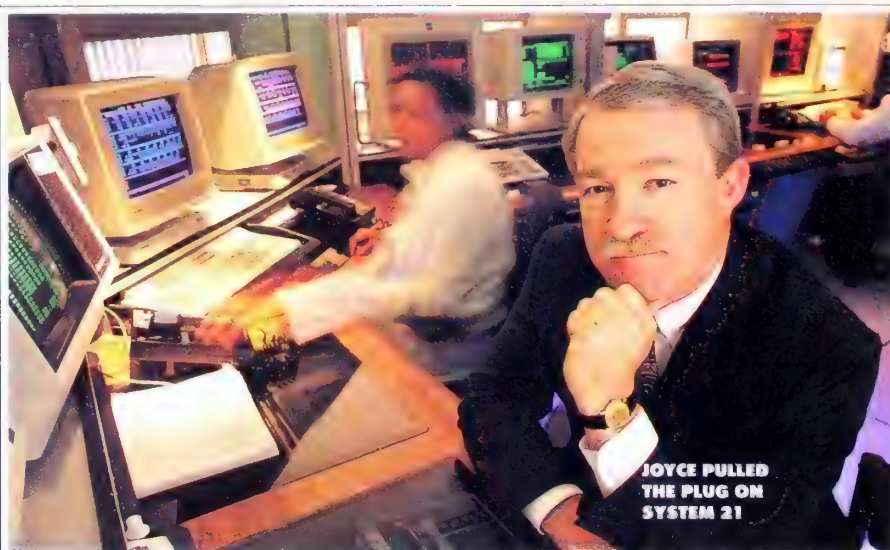
MISMANAGEMENT. Of course, be-
o timid carries a risk. By focusing
le stuff, companies can convince
elves they're making the needed
rements in their processes. But
ay never get around to asking the
questions that might point up the
for a more thorough re-engineer-
Companies have a temptation to
down things into 96 subprocesses
timize each of those," says Rudy
r, a managing partner at Ander-
onsulting. "What they end up with
optimized subprocesses, and they
t redesigned the business."

.. warns one information technol-
nsultant, is precisely the downside
cal quality management," the hot-
management fad of the 1990s. TQM
ms encourage employees to make
incremental improvements in
hey do their own jobs. But that
eep an organization from address-
ing basic issues, says Larry DeJar-
t vice-president at A.T. Kearney
nsultants. To use information sys-
effectively, management needs to
out the old assumptions about
ings are done, then build new pro-
It isn't easy, says DeJarnett: "If
aren't willing to undergo some
nd strain, you should not embark
iness-process re-engineering."

new religion is spreading. As it
he U.S. economy promises to be-
more efficient. That's good news
eroding standard of living. Com-
won't do it alone. But companies
et the whole package right—com-
and all—will still outperform
that don't.

Peter Coy in New York, with bureau

THE COMPUTER SYSTEM THAT NEARLY HOSPITALIZED AN INSURER



It was a failure of the first order. Blue Cross & Blue Shield of Massachusetts spent six years and \$120 million developing a computer system that would be cheaper and more responsive to customers. System 21 was trumpeted as "the future of Blue Cross." But early this year, behind schedule and over budget, the project was scrapped and the company turned over its computer operation to an outside contractor, Electronic Data Systems Corp. "We couldn't face the board and ask them for another \$120 million," says Martin V. Joyce Jr., a consultant hired last year as the Blues' senior vice-president of operations.

Train wrecks like that are rare. But with information systems gobbling up capital budgets, it's easy to see how devastating a botched computer project can be—especially for a company that already had other problems. A 1990 study by New York-based consultant Cresap-Tillinghast slammed Blue Cross of Massachusetts management for being inefficient and bureaucratic and missing the boat on managed health care. The company lost a third of its 3 million subscribers between 1985 and last year. In 1990, it came close to insolvency—partly because of cost overruns on the computer project.

BLIND FAITH. Where Blue Cross erred was in leaving technology too much to the technologists. After funding the huge project and approving an independent contractor to develop software, top management let nature take its course. The contractor, later bought by Policy Management Systems Corp. in Columbia, S.C., began writing pro-

grams for claims processing, billing, and enrollment. But, Joyce says, Blue Cross failed to give PMSC a firm set of priorities stating which features were essential and which programs had to be done first. Also, he says, supervision broke down because the insurer hadn't appointed a single executive to manage the project. So, when PMSC showed off the finished claims-processing software, various Blue Cross managers chimed in with requests for changes that delayed the whole project and led to cost overruns.

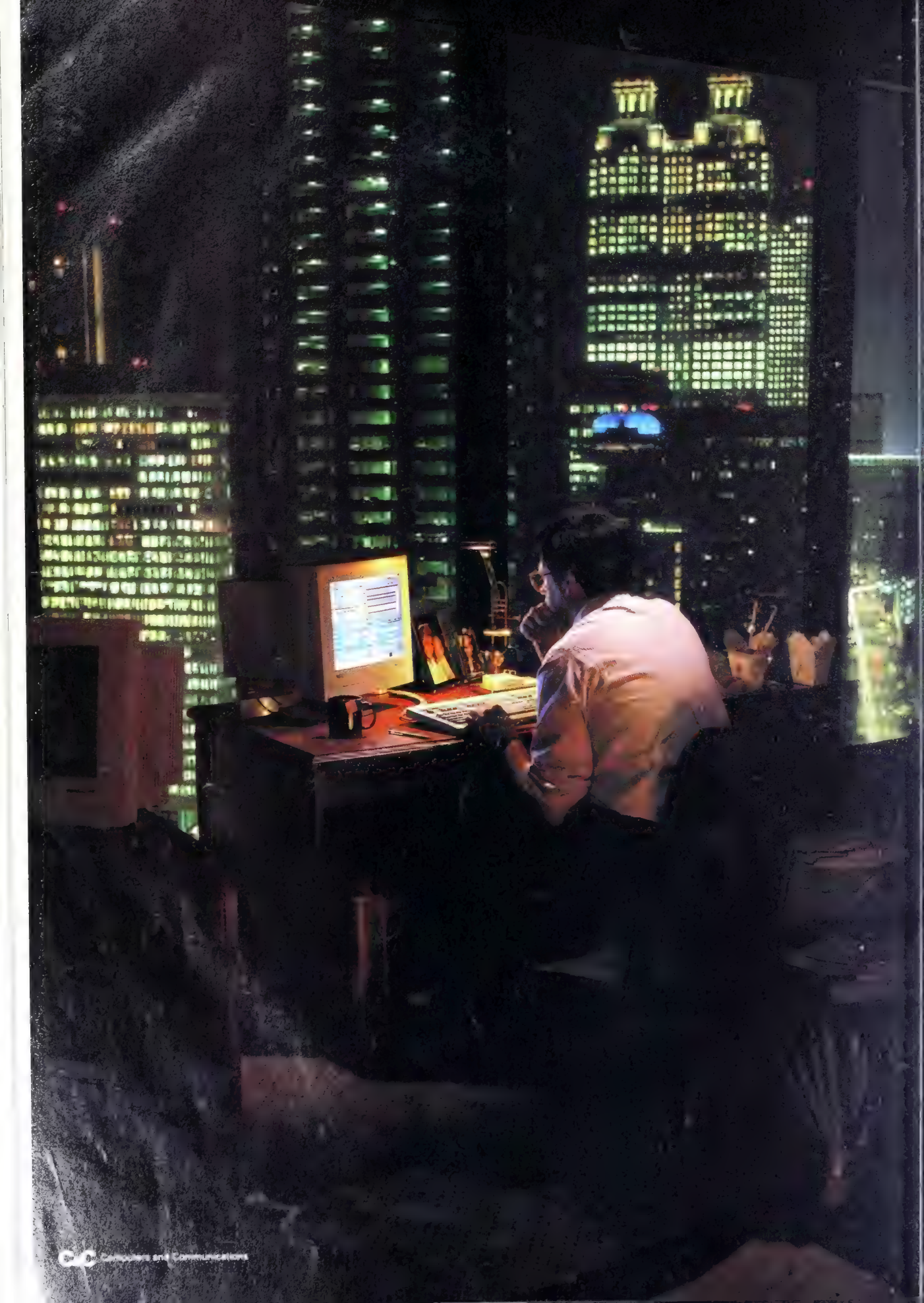
The delays were nearly as painful as the rising costs. By the time it launched System 21, Blue Cross was trailing other insurers in systems to manage the swelling load of paperwork. It had nine different claims-processing systems on hardware dating back to the early 1970s, and an internal task force in 1985 had recommended turning over data processing to EDS. But management refused, saying EDS was charging too much and lacked some key technology. Meanwhile, Blue Cross was proving incapable of creating new systems itself.

The Cresap-Tillinghast study triggered big changes. Blue Cross of Massachusetts immediately cut costs 15%, axed its money-draining computer project, trimmed layers of management, and got into managed care. The result: It earned \$39 million last year.

System 21 exists only as a painful lesson. Its IBM computers were taken over by EDS. And six years of programming has been tossed out. The operation was a failure, but the patient lived.

By Geoffrey Smith in Boston

ation on reprints of this Special Report, call
Week Reprints at 609 426-5494, or write Business
prints, P.O. Box 457, Hightstown, N.J. 08520.



9:27 PM

NEC makes a hard day's work a little easier.

Often, a day at the office runs well into the night. That's one of the reasons NEC places high priority on user comfort and safety in the development of new products.

We call this people-minded thinking our ErgoDesign™ philosophy, and our new line of MultiSync® Monitors is a prime example.

Their reduced ELF/VLF emissions meet the strictest safety guidelines in the world. They're flicker-free, with anti-glare protection for less eyestrain. A tilt-swivel base for less neckstrain. An anti-static screen coating that eliminates dust and static shock. And up-front controls that are easy to reach and use.

It's no wonder you'll see NEC products in corporations large and small. In public and private institutions. In homes across the country. At NEC, we don't consider our work done until we've made it easier to do yours.

For more information, call us at 1-800-338-9549.

MultiSync is a registered trademark and ErgoDesign is a trademark of NEC Technologies, Inc.

NEC

Caring through technology.

Communications • Computers • Electron Devices • Home Entertainment.

GROWTH VS. VALUE: TIPS FOR THE INTREPID INVESTOR

Coke vs. Pepsi. Ohio State vs. Michigan. Democrats vs. Republicans. In the stock market, there's a rivalry no less fierce and enduring: "growth" stocks vs. "value" stocks, in which aficionados of each continually face off against one another in the battle for investment success.

The competition seems especially heightened these days. Various market commentators and mutual-fund managers are urging investors, often with equally persuasive arguments, to buy growth stocks (or the mutual funds that invest in them), which have floundered so far this year, or to load up on value stocks (or funds), which are surging after three years of sluggish performance.

Historically, value stocks beat the market coming out of recessions and in the early stages of economic recoveries, because they usually include companies in industries that benefit from a booming economy—autos, chemicals, and steel. Stocks of growth companies, on the other hand, seem to deliver revenue and earnings gains year after year, no matter what the economy does. These companies tend to dominate their markets (Coca-Cola and Philip Morris) or are in high-growth industries, such as biotechnology (Amgen) and software (Lotus Development). The argument for growth stocks now is that the economic expansion will be a weak one, and value stocks will stumble as their companies' profits disappoint the Street.

This fight may sound like a spat over nothing. Don't all investors try to make capital grow? Don't they all seek value in their investments? Over



GROWTH STOCKS

Amgen	Lotus Development	Procter & Gamble
Banc One	Philip Morris	Safety-Kleen
Blockbuster	Newell	Toys 'R' Us
Entertainment	Nike	Wal-Mart Stores
Coca-Cola	Pfizer	Warner-Lambert
The Gap		

DATA: STANDARD & POOR'S/BARRA

the years, however, the terms have come to represent two distinct philosophies.

Intuitively, growth-stock investing makes sense. Value is a better way to beat the market than to invest in companies enjoying higher-than-average earnings growth? Since growth stocks always look expensive, the way to justify buying a Home Depot or Nike is to forecast even higher future earnings. If there's no room for error, when a growth company fails to meet expectations, the stock gets creamed.

HIDDEN STRATEGIES. Value investing's allure is that stocks are cheap. The key is to separate those that are merely out of favor from those that will never rebound. David Katz of Matrix Advisors says he looks for a company's financial strength. If cash is being generated, the balance sheet is strong, says Katz, "you won't be hurt." But value investing requires patience, since there's no telling when the payoff will come.

Often, investors want to duck the debate by leaving the decision to a mutual-fund manager. But many funds take one path or the other. Twentieth Century Investment in Kansas City, Mo., follows a strict growth-stock discipline in all of its equity funds. It has paid off handsomely in the past few years. Its Twentieth Century Ultra Investment fund was up 86.5% last year; its Vista Investors, 73.7%. This year, they're off 17% and 11.2%, respectively.

Among value funds, Vanguard's Windsor and Windsor II are among the big names. Both lagged behind the market last year: up 1% and 28.7%, respectively, versus

average fund was up . But so far this year, re up 10% and 4.4%.

reasingly, mutual-fund anies that specialized in h or value are offering of either persuasion. T.

Price Associates, the er of which did some ering research on th stocks, now offers al value funds, too. Like- Mario Gabelli, a top- r value investor, also the Gabelli Growth —though he hired a ch-stock specialist to

estors should be fore- d that mutual-fund ti- on't always reveal the ment strategy behind Many value funds have th" in their names, but ord is used to describe vestment objective—to the shareholders' capi- ow. And "value" can up in the title of a n-stock fund. "Project enough earnings, and an make a high-priced a stock look cheap—like e stock," says Robert on of investment-man- tant consultant Perfor- Analytics.

EYES. The megabuck a funds struggle with uestion of growth vs. onstantly and hire cons to find the best mon- agers from each camp. treet is also developing s to track growth and stocks and to measure performance of money ers who profess to fol- ne investment style. rd & Poor's, in con- with BARRA, an in- nt consulting firm, has the S&P 500-stock nto growth and value s. Pension consulting rank Russell also spins ssell 1000 index in- nings Growth and



VALUE STOCKS

Aetna Life & Casualty	Eastman Kodak	Pacific Gas & Electric
Bethlehem Steel	General Motors	Sears Roebuck
Chevron	IBM	Time Warner
Citicorp	Lockheed	UAL
Du Pont	Merrill Lynch	Westinghouse Electric

DATA STANDARD & POOR'S/BARRA

Price-Drive (value) indexes.

Which stocks go into which indexes is determined strictly by the numbers. Both S&P/BARRA and Russell use a company's book value—company assets minus liabilities—and divide that by the number of shares outstanding to come up with book value per share. Then, they divide the book value into price per share to get the price-to-book ratio.

The stocks are ranked by their p-b ratios, from lowest to highest. The S&P/BARRA Value index has 358 stocks and Growth has 172. That's

because the total market values of the two groups has to be the same. But growth stocks tend to have higher market values, so it takes fewer of them to make up their half of the S&P 500.

There are other ways to separate growth from value stocks. Some investors use price-earnings ratios, also ranking them from lowest to highest. Others prefer dividend yields: Value stocks sport the highest dividends, and growth stocks offer little or no yield. No matter, says S&P's Elliott Shurgin: "We

use the price-to-book ratio, but the other criteria will give you much the same results."

Such statistical screens are only a starting point. There's no substitute for kick-the-tires analysis. Companies change, and so does the market's opinion of them. In constructing the S&P/BARRA indexes, for instance, about 20% of the stocks "migrate" from one index to the other each year.

SWING SHIFT. A dramatic example has been IBM, for decades the quintessential growth stock as the overwhelmingly dominant player in a fast-growing industry. But the industry matured, competition eroded IBM's edge, profits collapsed—and so did the stock price.

Today, IBM is a value stock, and Frank Russell figures it has been in that camp since 1989. At 91, IBM's p-b and p-e ratios are below the market average, and its yield is 80% higher. Big Blue is down 48% from its 1987 high. That's the kind of profile that makes value investors sit up and take notice.

Is either strategy superior? According to the S&P/BARRA indexes, a \$10,000 investment in stocks in the value index at the end of 1974 would have been worth \$156,410 by the end of May, 1992—a 17.1% return, including reinvestment of dividends. The yield from growth-index stocks would have come to \$99,077—a 14.1% return.

But those results are for 17 years, not decades. Frank Russell analyst Dennis Trittin says all known investment studies "do not make the case that one style of investing outperforms the other." Over the very long haul, he may be right. But for shorter periods, it pays to watch how growth and value go in and out of fashion. *Jeff Laderman*

HOW THEY PERFORM

ANNUAL TOTAL RETURNS FOR:

S&P/BARRA VALUE INDEX

S&P 500

S&P/BARRA GROWTH INDEX

DATA STANDARD & POOR'S/BARRA

43.4	34.9	-2.6	6.8	21.2	39.4	0.0	22.0	28.9	10.5	33.3	21.7	6.5	21.7	36.4	0.2	38.4	5.6
37.2	23.6	-7.4	6.4	18.2	32.3	-5.0	21.4	22.4	6.1	31.6	18.6	5.1	16.6	31.7	-3.1	30.5	0.8
31.7	13.8	-11.8	6.2	15.7	23.6	-9.8	21.0	16.2	2.3	29.7	14.5	3.7	12.0	26.1	-6.8	22.6	-3.4
'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92

Leisure

THIS IS NOT YOUR FATHER'S TANDEM

When you think of tandem bicycles, do you picture the big rust buckets rented on the boardwalk along the New Jersey Shore? If so, think again. Today's two-seaters are built for racing, touring, and mountain biking, using the same high-tech components as their single-saddle cousins.

Tandem riding is a good way for an experienced cyclist to introduce new riders to bicycling. Some tandems can be equipped with working child-size pedals that let little legs pump along with an adult. Racks and panniers provide storage for overnight trips.

Togetherness is the tandem's main advantage. "Staying together on separate bikes is tough for two riders



BW'S REED AND WIFE, SUZI, ON THEIR CANNONDALE

of different fitness levels—one rider is always faster," says Tom Armstrong, spokesperson for Cannondale, one of 16 bicycle makers that market ready-to-ride tandems.

A tandem is not an impulse purchase, as entry-level models start around \$1,100 and quickly move up in price. Factory-made frames accommodate riders based on height, and manufacturers assume

that the taller person rides up front, with a smaller rider on the rear, or "stoker," seat. Mutt-and-Jeff cyclists of very different heights may require a custom-made frame, built for special sizes or needs.

BRAKING POWER. A ready-to-ride tandem in the \$1,000 range comes with gel-filled seats, cantilever brakes, 21-speed derailleurs, and racing handlebars. A higher price

buys better component lighter frame, and a smooth ride. A wise option is an auxiliary drum brake that operates on the back wheel. The braking power is welcome on a steep, twisting road.

Burley Design Cooper in Eugene, Ore., builds a wide line of tandems, with models ranging from Samba (\$1,150) to the Nova (\$2,095). The Samba gets you rolling with a frame and good-quality components. As you move up in price, the bike sports a forced frame and upgraded components. Buyers who select a high-end model, such as Cannondale's \$2,775 tandem, ride on a rigid yet lightweight, aluminum frame.

Whether you cycle for exercise, competition, or pleasure, a bicycle built for two creates an intimacy between riders. "When my wife and I rode in Europe again, we'll go on a tandem," says Barry Shoppe in Littleton, Colo. "They're great romantic rides."

Tom

With many U.S. pharmaceutical stocks sporting high price-earnings ratios, some investors are turning to overseas drug companies instead. They're buying such names as Britain's Glaxo or Swiss-based Ciba-Geigy and Sandoz through purchase of American Depositary Receipts. Each ADR represents one or more shares held by a branch of a U.S. bank in the country where the stock is issued. The arrangement lets you buy and sell receipts in dollars, with no worries about currency fluctuations.

The promise of big earnings gains from new drugs sold worldwide has fueled analysts' ADR recommendations. For example, researchers at Smith New Court think several drugs from Britain's Fisons will help reverse last year's 21% earnings drop and boost its

Smart Money

WHERE THE BOOM IN DRUG STOCKS STILL YIELDS BARGAINS

stock 15% to 20% annually.

ADRs from other international pharmaceutical giants should soon be available stateside. Among them: Sweden's Astra, whose new ulcer drug, Losec, helped it report a 40% pretax gain in first-

quarter profits. And Switzerland's Roche may arrive on the ADR scene late this summer. The maker of Valium has several drugs that Bernstein Research in New York includes among its "major drugs of the 1990s."

At Colonial International Equity Trust, a Boston-based mutual fund, Assistant Vice-President Betsy Palmer likes overseas drug-makers because "they're less expensive than U.S. pharmaceuticals, and p-e ratios are cheaper."

A reason for the relatively low prices might be that European companies are conservative by tradition and tend to

understate earnings. Sandoz and Ciba-Geigy recently taken steps to more accurately report earnings, boosting investor confidence in them—and in their ADRs.

PUSH-UP. Sam Isaly Mehta & Isaly research in New York says in the 15 months, U.S. investors bought about \$500 million worth of Sandoz and Ciba-Geigy. He predicts they'll buy an additional half-billion dollars' worth by year-end, which will push prices up.

Investing in foreign companies via ADRs is simpler than investing in foreign stocks through an overseas broker, but heed some cautions. Some ADRs aren't as liquid as regular shares, says Colonial's Palmer. To take price movement, you need to stay in close touch with your broker. And be aware that some ADRs are so thinly traded that a market maker can affect the price by buying or selling a relatively small amount.

Don

PROMISE IN THE PIPELINES

Drugmaker	Major new drug	Drug's 1996 est. sales Billions
ASTRA	Losec (ulcers)	\$2.0
CIBA-GEIGY	Nicotine patch (smoking)	1.0
GLAXO*	Imitrex (migraine)	2.9
ROCHE	Rocephin (antibiotic)	1.2
SANDOZ	Sandimmune (immune suppressant)	1.0
SMITHKLINE*	Augmentin (antibiotic)	1.4

*NYSE listed

DATA: SANFORD C. BERNSTEIN & CO

The
Experienced
Flyer

Anyone Who Flies On Business As Much As You Do Deserves A Medallion.

When you spend as much time in the air as you do in your office, we think you should be rewarded.

On Delta, it's our Medallion Level.

Besides giving our most frequent of flyers the special recognition they deserve, Medallion Level offers upgrades for just 2,500 frequent flyer miles.*

Substantially-reduced mileage awards. And, even better, you can use them whenever you want.†

To find out more about our Medallion Level, see your Travel Agent. Or call Delta at 1-800-323-2323.

And discover how rewarding business travel can really be.



DELTA
We Love To Fly And It Shows.®

Traditional box stereo speakers have stood sentry on many a shag carpet. But some discriminating listeners turned a deaf ear to such speakers, which combine tweeters, woofers, and midrange units all in one box. Instead, connoisseurs sought exotically shaped electrically charged panel speakers that mated dynamic woofers with mylar film sheets to handle middle and upper frequencies. If you had to redecorate your living room to accommodate the bizarre configurations, so much the better—it just increased their cachet.

Recently, however, audiophiles are returning to the more conventional dynamic loudspeaker—although today's top-of-the-line boxes bear only passing resemblance to the models of yesteryear. What's driving the new respect for box speakers is the availability of lightweight, rigid materials and extensive computer-aided research into the acoustic properties of cabinets. Where loudspeaker manufacturers once relied on cheap particle-board enclosures and flimsy

BULLETPROOF WOOFERS AND TITANIUM TWEETERS

speaker cones that flapped at the first pluck of an electric bass, today's designers use titanium midranges and woofers made from ceramics or Kevlar, the same material used for bullet-proof vests. Cabinets are built from hand-finished hardwoods that provide a more natural resonance. Box speakers "are actually sonically superior in their ability to resolve detail," says Neil Patel, designer of the Avalon Acoustics range of speakers.

Ironically, the improvement in box speakers comes from the ability of contemporary designers to make them, well, less boxy-sounding. Traditional speakers always had the capability to provide more dynamic range than panel speakers, which simply cannot produce gut-wrenching bass. But the more natural midranges of the flat panels were preferable to the congested sound of most boxes. And the cheaply made cabinets added their own unpleasant distortions and colorations. The use of low-resonance woods and increased internal bracing have gone a long way to providing a far more open and focused sound from box speakers.

INTERNAL RACKET. This has been aided by advances in materials. Titanium, for instance, is highly rigid yet very light, a combination that allows more realistic reproduction than the old paper or cloth tweeter cones. "You were hearing not only the sound from the drivers themselves but internal noise," says Paul Hales, who designs the Hales

Stereo

Audio System series of speakers. "You were hearing extremely distorted sound."

The new excellence doesn't come cheap. A topflight pair of full-range dynamic speakers such as the Snell Acoustics A/III will run at least \$5,990—and prices go up, way up, from there. Hales Audio's System One Reference fetches a cool \$16,000 a pair. Much of the cost, 60% in the case of the Hales, is attributable to the fancy woodwork and internal design. But even at less than half that price, cabinetry has come a long way. A pair of British-made ProAc Response Three speak-



THE \$7,200 AVALON ECLIPSE: LOW VIBRATION



THE \$6,500 PROAC RESPONSE THREE: BASS TONES ARE A SPECIALTY



HALES AUDIO'S \$3,400 SYSTEM TWO: FANCY DESIGN AND WOODWORK

there is also hope. Some technological improvements, notably the use of space-age materials and computer-aided design, have filtered down to more affordable loudspeakers. Snell's E/III for under \$1,000 a pair features a fast-cooled dome tweeter similar in design to those found in the company's most expensive models. And Acoustic Research, one of audio's most famous names, recently introduced a \$250-a-pair bookshelf model that uses a polypropylene cone for the bass unit.

To audiophiles, the revolution in box loudspeakers is evidence there's still life in traditional designs. Who knows? Maybe shag carpets will come back, too.

Tim S

Worth Noting

■ **VAT FACTS.** Few companies claim the refunds to which they are entitled for certain value-added taxes their employees pay when traveling on business in Europe. Meridian Reclaim Services does all the multilingual paperwork, charging a fee only if a refund comes through. Call 212 695-8424.

■ **TAPE IT EASY.** Something to consider before you buy a VCR-Plus device to program a video recorder automatically: New high-end VCRs from RCA, Zenith, JVC, Sanyo, and others come with the heavy system built in.



SNELL'S A/III: ACCURACY ON THE HIGH FREQUENCIES FOR \$5,990

We're AMBAC.

OUR
COMMITMENT
TO AMERICA
STARTS HERE.

And we back the bonds that build the schools, the libraries and even the city halls in towns and cities throughout America. The fact is, more than one third of all the insured general obligation municipal bonds issued during the past ten years have been insured by AMBAC. But, then, you'd expect that kind of leadership from the people who founded the municipal bond insurance industry.

At AMBAC, we're beginning our third decade of commitment to America. Which means helping secure our country's future by assisting in the rebuilding of the physical systems that support basic public services.

We're also strongly committed to the municipal bond industry. To the investor as well as the issuer.

Because while AMBAC's commitment starts with America's towns and cities, it doesn't end there.



AMBAC

AMBAC Indemnity Corporation
One State Street Plaza, New York, NY 10004
(212)668-0340

FREE INFORMATION FOR READERS OF **BusinessWeek**

Want more information about advertisers in this issue?

If so...

1. Review the list of advertisers below.
2. Circle the corresponding number on the postage-paid reader service card, complete the necessary information and drop in the mail.
3. Or, call toll-free Monday—Friday 8AM—5PM MST:

1-800-345-3550

When prompted, use keypad to enter this control number **8299600***

ANNUAL REPORTS

1. PFIZER INC

2. Searle

FINANCIAL PRODUCTS AND SERVICES

3. CIGNA Corporation

4. Delta Dental Plans

5. New York Life
Insurance Company

6. UNUM Life Insurance

7. Wausau Insurance
Companies

PRODUCTS/SERVICES

8. AEG

9. American Medical
Association

10. Amoco Chemical
Company

11. Braun Electric Shavers

12. Buick Motor Division

13. Canon Copiers

14. Delta Airlines

15. Dupont Safety
Management

16. Eastman Kodak Health
Group

17. FIAT S.p.A.

18. Fujitsu Business
Communication System

19. Fujitsu Network
Transmission Systems,
Inc.

20. Haworth, Inc.

21. Intergraph Corporation

22. Lexmark Supplies

23. Motorola Technical
Systems Division

24. NEC

25. Novell, Inc.

26. RPS (Roadway Packa
System)

27. Siemens Corporation

28. Subaru of America

29. Sun Microsystems

30. The Timken Compan

31. Unisys

32. Yellow Freight Syste
Inc.

AREA DEVELOPME

33. Iowa Department of
Economic Developm

Index to Companies

This index gives the starting page for a story or feature and a significant reference to a company. Most companies are indexed under their own names. Companies listed only in tables are not included.

Research 140	CSC Index 128
Economics 44	Cummins Engine 56
Services 106	CVRD 60
50	Cyrix 95
Airlines 44, 128	D
Express 56, 100,	Daewoo 106
6	Dana 50
Best Airlines 44	Dayton Hudson 122
6	Dean Witter Reynolds 42,
Corporate 60	120
Consulting 128	Debevoise & Plimpton 60
	DecisionQuest 108
Julose 60	Dell Computer 43
96	Deloitte & Touche 47
	Delta Air Lines 44
ch 43	Denon 42
112	Digital Equipment 54, 146
42	Dillard 122
ms 47	DKB Securities 10
ustics 140	Donaldson Lufkin &
	Jenrette 120
	Dow Chemical 56, 108
	Duarte Vivas 54
	E
st 60	Eagle Asset
6	Management 120
6	Electronic Data Systems 37,
athway 47	128, 133
Research 138	Elf Atochem North
& Blue Shield of	America 128
setts 128, 133	ESPN 41
sulting Group 128	Estrella Americana 60
Sox 100	Exxon Services Venezuela 56
gn	F
ve 138	Federal Express 128, 132
	First Boston 56, 60
138	Fisher Agency 10
es/ABC 41	Fisons 138
	Ford 10
ustries 120	Fosforos Chilenos 50
50, 106, 146	Frank Russell 136
	Fruehauf 106
Mexicanos 60	Fuji Bank 100
International 40	G
nattan 56, 60	Gaylord Broadcasting 100
aste	GE 56, 146
ent 10	General Dynamics 96
ls 100	Gillette 34, 56, 110
rp. 43	Ginnie Johansen Designs 122
ite Sox 100	Glaxo 138
138	GM 34, 47, 56, 128
	Goldman Sachs 49, 60
Vilacron 10	Goldstein Golub Kessler 128
43	H
y, 128	Hales Audio 140
ment 106	Hartmarx 40
	Heinz 110
136	Hewlett-Packard 50, 56, 96
International Equity	Home Depot 136
	Honeywell 108
chandising 110	Hyatt 128
e Telefonos de	Hyster-Yale 106
	I
50	Iberia Air Lines 50
ciences 128	IBM 56, 95, 96, 136
Airlines 44	IDS Financial Services 30,
Bank 60	112
116	Institutional Shareholder
ghost 133	Services 40
	Intel 43, 95, 96

J	JMB Realty 100
	Jury Analysts 108
	Jury Research Institute 108
	JVC 42, 140
K	
	Kearney (A. T.) 128
	Keystone Group 116
	Komatsu 106
	KWWL-TV 41
L	
	La Rochelle Travel 44
	Lazard Freres 41
	Lees' Marketing Services 110
	Litigation Sciences 108
	Littleton Bicycle Shoppe 138
	Lotus Development 136
M	
	Mabon Securities 43
	Macy (R. H.) 122
	MasterCard
	International 128
	Matrix Asset Advisors 136
	Matsushita 42
	May Department Stores 122
	McDonnell Douglas 96
	McGraw-Hill 31, 32
	MCI Communications 108
	McKinsey 112
	Mehta & Isaly 138
	Meridian Reclaim
	Services 140
	Merrill Lynch 128
	Minolta Camera 108
	Mitsubishi 106
	MMS International 32
	Morgan (J. P.) 60
	Morgan Stanley 128
	Munger, Tolles & Olson 47
N	
	NACCO Industries 106
	National Union 108
	NBA 100
	NBC 41, 100
	Nestle 50, 110
	New York Yankees 100
	Nike 136
	Nissan 106
	NMB Bank 60
	Nordstrom 122
	Northwest Airlines 44
	Nu-Med 116
O	
	Olympia & York 25
	Oracle 56
P	
	Park-Ohio Industries 47
	PDVSA 56
	Pennzoil 128
	Perez Companc 50
	Performance Analytics 136
	Perfumaria 120
	Perot Group 37
	Petrobras 60
	Petroleos de Venezuela 60
	Philip Morris 136
	Philips Electronics 42
	Phoenix Suns 100
	Pizza Hut 50, 56, 146
	Policy Management
	Systems 133
	Polygram 42
	Portland Trail Blazers 100
	ProAc USA 140
	Procter & Gamble 110

R	
	Ralston Purina 110
	Rauscher Pierce Refsnes 43
	RCA 140
	Rebate Information
	Center 110
	Rhone-Poulenc 50
	RJR Nabisco 112
	Roche 138
S	
	Salomon Brothers 47, 60
	Samsung 106
	Sandoz 138
	S&S International 95
	Sanger Harris 122
	Sanyo 140
	Scott Fetzer 47
	Sears Roebuck 40
	Shaw Industries 120
	Shearson Lehman
	Brothers 100
	Shell Oil 108
	Showboat 120
	Siemens 50, 96
	Smith Barney 116
	Smith New Court 138
	Snell Acoustics 140
	Sony 42
	Souza Cruz 50
	Sprint 34
	Standard & Poor's 136
	Sun Microsystems 128
T	
	Technical Equities 108
	Tektronix 96
	Tele-Communications 41
	Telefonos de Mexico 60
	Televisa 60
	Terex 106
	Texas Rangers 100
	Thorn EMI 42
	Time Warner 41
	TNT 100
	Toyota 106
	Trans World Airlines 44
	T. Rowe Price Associates 136
	TRS 112
	Twentieth Century
	Investors 136
U	
	UPS 128, 132
	USAir 44
V	
	Vanguard 136
	Villares Group 56
	Vitro 60
	Volkswagen 56
W	
	Wal-Mart 128, 146
	Waste Management 10
	Westinghouse 40
	WGN-TV 100
X	
	Xerox 50, 54, 128
Y	
	YPF 56
Z	
	Zenith 140



BREITLING

1884

INSTRUMENTS
FOR PROFESSIONALS



CHRONOSHARK

A dependably rugged, high precision chronograph with timing to 1/10th of a second and intermediate times display. Excellent legibility even at night. Fast-action time zone changes. Battery end-of-life indicator. Screw-locked crown. Water-resistant down to 100 meters. Rotating bezel.

CAPRICCIO
FINE JEWELRY LTD.

BILTMORE FASHION PARK
2570 E. CAMELBACK RD.
PHOENIX, AZ 85016
(602) 954-6106

THE BORGATA
6166 N. SCOTTSDALE RD.
SCOTTSDALE, AZ 85253
(602) 948-4708



MEMOREX
DIGITAL
STEREO
HEADPHONES

Is It Live Or Is It Memorex?

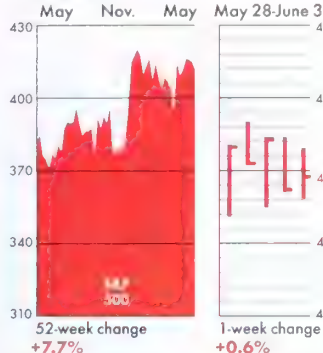
Memorex is a registered trademark of Memorex Corporation. Copyright 1995

Investment Figures of the Week

MARKET

er notch in the Dow's
a month of trying, the in-
closed above the 3400
a new high of 3413.2
pulled back, then
er the milestone again
Surveys showing a pick-
er confidence implied
conomy ahead, and that
the Dow over the top.
er S&P 500 is still in a
index was held back this
out in drug and health
s—a source of strength
the last three years.

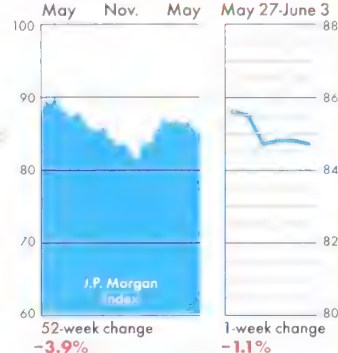
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	% change Week	52-week
STOCKS			
S INDUSTRIALS	3407.0	1.1	13.4
INIES (Russell 1000)	219.4	0.7	9.0
APANIES (Russell 2000)	200.0	1.5	12.0
INIES (Russell 3000)	233.9	0.7	9.2
		% change (local currency)	
	Latest	Week	52-week
FINANCIAL TIMES 100)	2680.9	-0.7	6.3
(KEI INDEX)	18,188.7	2.1	-28.1
TSE COMPOSITE)	3407.3	0.7	-4.2

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.80%	3.79%	5.8%
30-YEAR TREASURY BOND YIELD	7.88%	7.90%	8.4%
S&P 500 DIVIDEND YIELD	2.98%	2.99%	3.1%
S&P 500 PRICE/EARNINGS RATIO	25.4	25.2	18.3

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	408.7	407.3	Positive
Stocks above 26-week moving average	51.8%	50.6%	Negative
Speculative sentiment: Put/call ratio	0.36	0.42	Neutral
Insider sentiment: Vickers sell/buy ratio	1.98	2.26	Positive

INDUSTRY GROUPS

MARK LEADERS			BRIDGE INFORMATION SYSTEMS INC		
	% change 4-week	52-week	Strongest stock in group	% change 4-week	52-week
MINING	7.9	-8.0	NEWMONT MINING	12.5	19.0
	7.7	53.0	HASBRO	10.6	40.3
PLANTS	6.7	31.3	McDONALD'S	8.6	35.4
GAS DRILLING	6.5	-18.0	ROWAN	14.3	-26.3
ASTING	6.4	10.7	COMCAST	10.7	3.1
MARK LAGGARDS			Weakest stock in group		
	% change 4-week	52-week		% change 4-week	52-week
CTURED HOUSING	-17.9	-5.7	FLEETWOOD ENTERPRISES	-20.1	-4.7
L MANAGEMENT	-14.4	-44.9	HUMANA	-19.1	-41.7
Y APPAREL RETAILERS	-12.5	-17.7	GAP	-22.9	-4.0
E TOOLS	-11.1	12.4	BROWN & SHARPE MANUFACTURING	-13.9	-26.2
ONTAINERS	-9.2	14.3	STONE CONTAINER	-15.2	9.2

MUTUAL FUNDS

total return			MORNINGSTAR INC		
	%				
ANESE SMALL COMPANY	12.4				
STRATEGIES	11.6				
SELECT SAVINGS & LOAN	9.0				
al return			4-week total return		
	%				
SELECT SAVINGS & LOAN	51.5				
SELECT REGIONAL BANKS	49.1				
A REGIONAL BANK B	46.5				
LAGGARDS			52-week total return		
	%				
SCHILD VALUE	-14.4				
SCHILD AGGRESSIVE GROWTH	-8.8				
STEADMAN OCEANOGRAPHIC TECHNOLOGY	-5.9				
52-week total return			4-week total return		
	%				
LEXINGTON STRATEGIC INVESTMENTS	-36.1				
STRATEGIC GOLD/MINERALS	-32.5				
UNITED SERVICES GOLD SHARES	-27.2				

LIVE PORTFOLIOS

DATA RESOURCES INC.					
ounts the present 10,000 ne year ago rtfolio					
s indicate al returns					
Treasury bonds	\$11,326	U. S. stocks	\$10,987	Foreign stocks	\$10,740
	+0.51%		+0.51%		+0.21%
				Money market fund	\$10,409
					+0.06%
				Gold	\$9,323
					+0.18%

is page are as of market close Wednesday, June 3, 1992, unless otherwise indicated.
s include S&P 500 companies only; performance and share prices are as of market close

June 2. Mutual fund returns are as of May 29. Relative portfolios are valued as of June 2. A more detailed
explanation of this page is available on request

¡SOCIALISMO, NO! ¡CAPITALISMO, SI!

They're cutting red tape, freeing markets, opening the economy to foreign investment, tearing down trade barriers, and selling off government-owned companies. Eastern Europe and the Soviet Union after the collapse of communism? Nope. Latin America. From Mexico to Argentina, nations with some 400 million people are abandoning the heavy-handed statist economies that kept them, in many cases, poorer than the Russians (page 50). They are replacing them with market-driven systems that they hope will make them as rich as the Taiwanese and Koreans. The capitalist rebirth taking place—right in the Western hemisphere but out of the U.S. media spotlight—may turn out to be as vital to America's economic and political well-being as the demise of communism.

So far, Latin America's big shift is creating big business opportunities. U.S. exports to the region, now running at about \$70 billion a year, exceed those to Japan, and they are growing faster than exports to Europe and Asia. With Europe and Japan in a slow-growth mode, this trade is a helpful boost to profits at companies ranging from Caterpillar and General Electric to Digital Equipment and Pizza Hut. American products and technology have, to an extraordinary degree, retained their cachet in Latin America. That, plus long-standing ties between American and Latin corporations, gives the U.S. an important edge against the Japanese and Europeans in one of the world's fastest-growing regions. With factories, ports, and phone systems in disrepair, U.S. industry stands to benefit from a capital-goods boom.

And with money starting to pour into the economies through privatization and stronger growth, consumer-products companies will do well also.

Much of the credit for the economic revival goes to a small band of U.S.-trained PhDs and MBAs who run the governments and ministries throughout Latin America. It is a group that used the dismal failure of the socialist development model to persuade governments to deregulate, attract foreign investment, and fight inflation. But Washington, too, can take a modest bow for its efforts. The Brady Plan helped set the stage for financial stability in countries as Argentina and Chile by permitting U.S. Treasury bonds to be used as collateral in swaps of billions of dollars of Latin American loans from American banks for new U.S. government bonds. The Bush Administration should now extend the stabilization program by giving a "Brady" to Brazil.

To reinforce the efforts of Latin America's free market, the Bush Administration is pushing to open all of North and South America to free trade. Increased trade and investment can raise living standards for Latin America's huge underclass. They can also provide hope for a better life to the politically powerful middle class now being squeezed by the nationalization of state enterprises and cutbacks in government civil-servant payrolls that together employ millions of people. If the benefits of economic liberalization do not reach the poor and disenfranchised quickly, political pressures could push Latin America back to its statist, protectionist past.

CURING A HIGH-TECH HANGOVER

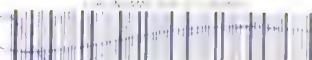
It's the morning after for Corporate America—following a decade-long binge on information technology. Sobering up after spending nearly \$900 billion in the service sector alone, companies are wondering what happened to the promised payoff. White-collar productivity, although rebounding a bit lately, is still below its late-1970s level, before all that treasure was spent on fancy computers and systems. Feeling betrayed by info-gurus who promised "killer apps"—computer applications that would give them strategic competitive advantages—CEOs are holding down budgets for information technology. Frustrated at the lack of progress and by the high cost of the computer systems, a few are even turning over the management of their information systems to outsiders.

What's needed? A corporate "12-step" program for technology sobriety (page 128). Companies are realizing that it's people who improve productivity; computers are merely powerful tools. The first step is to define and analyze the actual work being done. Without going back to the basics of corporate strategy and good management, the addition of new technology can actually bollix things up, making them

more complex, confusing, and expensive. But once corporate goals are understood and the flow of work is clear, applying information technology can boost productivity. Wal-Mart Stores Inc., for example, uses computerized cash registers and satellite dishes on store roofs to monitor sales and stock new goods. Its choice of information technology is appropriate to its strategy of selling products that consumers want as cheaply as possible.

All the other steps involve matching technology with the way people work. The temptation by corporate information managers to buy the most powerful technology often results in bells and whistles that white-collar workers don't understand and don't use. By buying much simpler, more true products, companies not only can raise productivity but also save money. Bringing white-collar workers into decisions about what technology to buy makes a lot of sense, too. Employees can tell managers what they need, then test it out to see if it works in real-world situations. This allows them to "buy into" the introduction of new information systems. Instead of technology busters, employees become technology boosters.

BusinessWeek



3 9042 03140374 1

2, 1992

A MCGRAW-HILL PUBLICATION

\$2.75

MUTUAL
FUNDS

STOCKS

REAL
ESTATE

FOREIGN
MARKETS

BONDS

JUNK
BONDS

WHERE TO INVEST

WILL RECOVERY
DRIVE STOCKS
HIGHER?

■ BEATING THE
MARKET WITH
MUTUAL FUNDS

■ FINDING THE
SAFE YIELDS IN
BONDS

■ IS REAL ESTATE
TURNING THE
CORNER?

94010-4083 BURLINGAME CA

480 PRIMROSE RD

BURLINGAME PUBLIC LIBRARY

0602 105811160 DEC92 136 2782

94010

*****5-DIGIT

Open In



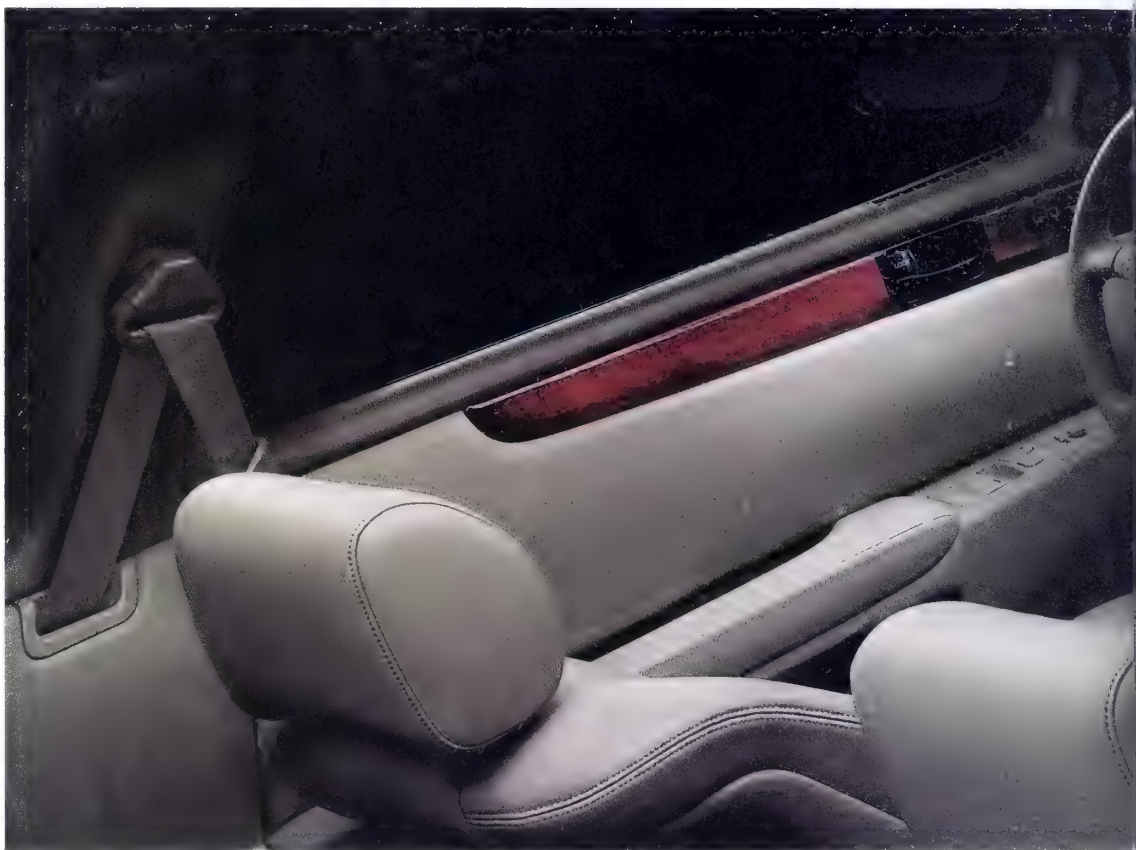
Invitation

Or, How National ISDN Can Open A New Era Of Communications For You.

The benefits of a new digital public network, National ISDN, will soon be made available to you by your local telephone company and AT&T. Using our technology, the telcos already offer central office based solutions like advanced voice services, PC screen sharing and image communications. Without expensive on-site equipment or maintenance headaches. National ISDN represents an industry-wide agreement to digitize the public network based on open standards, so you'll soon be able to get the same high quality service wherever you're located. If you're evaluating your current network or forecasting capital investment, it makes more sense than ever to talk to your local telephone company. And find how much more they can do for you.

*AT&T and Your Local Phone Company
Technologies For The Real World.*





Perhaps you got a chemistry set instead of a pony on your birthday. Or had to share a room through those crucial formative years.

Take heart. You can now own an automobile that gives you just what you want.

The Lexus SC400.

Its smooth, flowing lines can turn even the most

If Yo

stubborn of heads. And the 32-valve V8 engine can turn those heads very quickly indeed. There's also a racing-inspired suspension system to help straighten curves.

But performance didn't make it *Motor Trend* 1992 Import Car of the Year.

The seats are still



Nakamichi Premium Sound System and 12-CD auto-changer are optional.



weren't Spoiled As A Child, here's A Second Chance.

Advanced ergonomics
upholstered in supple leather.
The view is fine Bird's-Eye
. Even your ears are
pleased; there is a seven-
speaker Nakamichi sound

system* that brings your fa-
vorite CDs remarkably to life.

In fact, the SC400 pam-
pers you as few automobiles
can. And it has a lot more
horsepower than a pony.


LEXUS
The Relentless Pursuit Of Perfection.



PLACE YOUR BETS: BUSINESS WEEK'S MIDYEAR INVESTMENT OUTLOOK SUPPLIES THE IDEAS, YOU SUPPLY THE MONEY AND PATIENCE

Cover Story

82 WHERE TO INVEST

Blue chips, Third World markets, bonds, mutuals, even real estate. It's BW's guide to investment success in the second half of '92

86 WELL, IT BEATS NO GROWTH

The recovery won't be a barn burner

88 POW IN THE DOW

A few sizzlers will lead the way

89 ELECTION JITTERS? BE CALM

Campaigns are good for the market

90 SECONDARY STOCKS

Will they get a second wind?

94 THREE PROS, TWO COUPS

How they did against the market

96 OVERSEAS ADVENTURES

Europe and Latin America look hot

98 NO SPARK, NO RALLY

Barely lower rates won't move bonds

100 THE JUNK STOPS JUMPIN'

But fund returns are still 11%

102 REVERSAL OF FORTUNE

Since '91, a swift change in mutuals

104 REAL ESTATE'S RETURN

It's climbing out of its black hole

106 THE BEST OF 1992

Here are the winners so far

108 INSIDE WALL STREET

Hot picks that may bring out the speculative streak in you

Top of the News

30 MORE PAIN FOR PARTS MAKERS

GM's new efficiency drive tightens the screws on its suppliers

32 WORKING UP A SWEAT

The diet industry girds for battle

33 ELI LILLY'S DEPRESSING NEWS

Prozac's sales are flat—and now, it's not likely to be approved as a diet aid

34 COMMENTARY

We don't want a chip war with Japan—but how about a skirmish?

35 THE SOUTHAMPTON SEVEN

The SEC's insider-trading net widens

36 A DEFENSE TITAN DOWNSIZES

General Dynamics' asset sell-off is producing booty for shareholders

38 A PREDATOR'S NEW STRIPES

Hanson says it wants 'friendly' d

40 KODAK'S MUG SHOT

An antitrust suit will go to court

40 MCI AFTER MCGOWAN

It will stay focused on long dista

42 SACKED BY A JURY?

NFL owners head for trouble in c

44 IN BUSINESS THIS WEEK

Apple in Japan, airfare wars, Forstmann Little, Beverly Hills Prime Computer, Nintendo's pit

International Business

48 VIETNAM

Corporate America is gearing up to move fast once the embargo end

52 RUSSIA

Will too much reform sink Yeltsi

53 GERMANY

Daimler pushes into semiconduct

54 EUROPE

Infonet's parents eye its turf

58 INTERNATIONAL OUTLOOK

European unification is on the r



GM SQUEEZES HARDER:
DETERMINED TO CUT COSTS, THE AUTO
MAKER IS REWRITING THE BOOK FOR
ITS SUPPLIERS—AND ONLY
THE FITTEST WILL SURVIVE



66 IT'S IN THE JEANS:
CEO LAWRENCE PUGH HAS DRESSED UP
VF CORP., MAKER OF LEE AND
WRANGLER, BY TARGETING VARIED
LINES TO DIFFERENT STORES



110 COMING DOWN TO EARTH:
IN THE WAKE OF THE COLD WAR, NASA
CHIEF DANIEL GOLDIN IS FACING BIG
BUDGETARY RESTRAINTS THAT COULD
SLOW PLANS FOR A SPACE STATION

Economic Analysis

ECONOMIC VIEWPOINT

Becker: Ticket out of the inner city

ECONOMIC TRENDS

Weak investment, easier credit,
jobless teens, imported cars

BUSINESS OUTLOOK

A green light from the job front

Government

WASHINGTON OUTLOOK

Business PACs' anti-incumbent fever

PAPERLESS OFFICE-SEEKERS

On the technocampaign trail

Social Issues

GODSEND OR GIVEAWAY?

Debating low-income-housing credits

The Corporation

VF'S SNAPPY NEW LOOK

Listening to customers helped the
clothing company re-tailor smartly

FOOD LION IS STILL STALKING

It's expanding despite a sales dip

Marketing

MACY'S NEW MATH MAN

The board bets the store on co-CEO
Mike Ullman, number-cruncher

Industries

BREEDING CONTROVERSY

The plutonium project in Japan

People

80 THE LORD OF DO-IT-YOURSELF

With a newly purchased title,
84 Lumber Co.'s Joseph Hardy
goes back behind the counter

Science & Technology

110 LOST IN SPACE

NASA is being forced to scale back its
expectations for the future

115 DEVELOPMENTS TO WATCH

Pizza for livestock feed, early
diagnosis for sick gums, electric
cars, smokers' ills, HDTV



48 GOOD MORNING, VIETNAM!
WITH BOTH HANOI AND U.S.
COMPANIES EAGER FOR TRADE—AND
WASHINGTON LOOKING THE OTHER
WAY—THE EMBARGO IS CRUMBLING

Information Processing

120 XEROX' NEW, NEW THINKING

This time, it aims to send products
flying out of the lab

121 MOLDING A MODEL

XSoft is to show Xerox the way

122 THE KIOSKS ARE COMING

Touch-screen computers are all over

The Workplace

127 THE FENDER-BENT UAW

Banged up by Cat and GM, it rattles
toward a crucial convention

Personal Business

138 POLITICS: Joining Campaign '92

POLITICS: How to volunteer

GADGETS: Creative juicers

SMART MONEY: Estate taxes

TRAVEL: Cliveden, glory of England

Features

6 BUSINESS WEEK INDEX

7 EDITOR'S MEMO

7 READERS REPORT

11 CORRECTIONS & CLARIFICATIONS

12 BOOKS

143 INDEX TO COMPANIES

145 INVESTMENT FIGURES OF THE WEEK

146 EDITORIALS

Next stop is Vietnam

Bill McGowan never let up

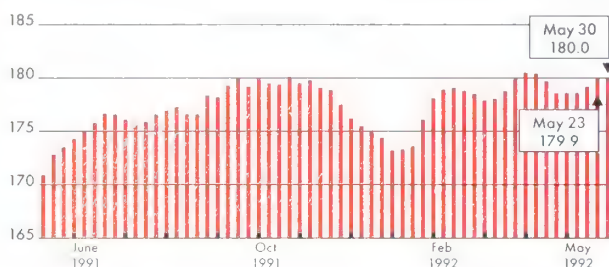
The wrong approach on CEO pay

BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 3.3%

1967=100 (four-week moving average)

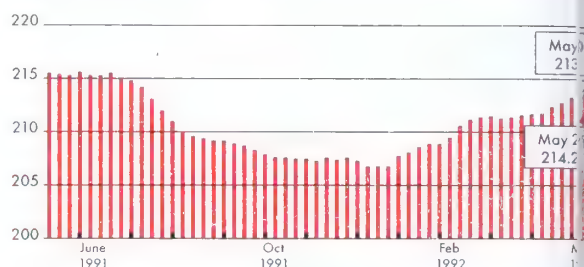


The production index was virtually flat for the week ended May 30. On a seasonally adjusted basis, output of autos, electric power, coal, and paper, and rail freight traffic all declined, while lumber production increased. Steel, truck, crude-oil refining, and paperboard production were unchanged from the previous week. Before calculation of the four-week moving average, the index fell to 179.8, from 180.7. For May, the index stood at 180, up from 178.8 in April.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: -0.2%
Change from last year: -0.9%



The leading index dropped in the week ended May 30. Lower stock prices, slightly higher bond yields, and declines in the growth rates of real estate loans and M2 offset the positive signals from faster growth in materials prices and a decline in business failures. Before calculation of the four-week moving average, the index fell to 212.1, from 213.4. For the entire month of May, the index stood at 213.7, little changed from 213.1 in April.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (6/6) thous. of net tons	1,785	1,771#	15.1
AUTOS (6/6) units	135,604	111,173r#	22.9
TRUCKS (6/6) units	88,568	76,416r#	11.0
ELECTRIC POWER (6/6) millions of kilowatt-hours	54,426	51,479#	-6.0
CRUDE-OIL REFINING (6/6) thous. of bbl./day	13,930	13,802#	1.3
COAL (5/30) thous. of net tons	16,957#	18,820	3.7
PAPERBOARD (5/30) thous. of tons	821.2#	817.9r	8.7
PAPER (5/30) thous. of tons	743.0#	749.0r	0.8
LUMBER (5/30) millions of ft.	420.3#	501.4	-4.1
RAIL FREIGHT (5/30) billions of ton-miles	18.7#	20.8	13.3

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/10)	128	128	141
GERMAN MARK (6/10)	1.59	1.61	1.80
BRITISH POUND (6/10)	1.83	1.82	1.63
FRENCH FRANC (6/10)	5.36	5.42	6.12
CANADIAN DOLLAR (6/10)	1.19	1.20	1.14
SWISS FRANC (6/10)	1.45	1.47	1.54
MEXICAN PESO (6/10)	3,101	3,098	3,011

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/10) \$/troy oz.	337.650	339.900	-9.2
STEEL SCRAP (6/9) #1 heavy, \$/ton	88.50	92.00	-0.6
FOODSTUFFS (6/8) index, 1967=100	204.0	202.1	1.3
COPPER (6/6) ¢/lb.	106.6	105.6	3.2
ALUMINUM (6/6) ¢/lb.	60.5	60.5	7.1
WHEAT (6/6) #2 hard, \$/bu.	4.04	3.89	33.8
COTTON (6/6) strict low middling 1-1/16 in., ¢/lb.	55.38	54.29	-30.7

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1-Western Wood Products Assn. 2-Southern Forest Products Assn. 3-Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (6/5) S&P 500	414.43	413.94	
CORPORATE BOND YIELD, Aaa (6/5)	8.24%	8.25%	
INDUSTRIAL MATERIALS PRICES (6/5)	98.0	98.1	
BUSINESS FAILURES (5/29)	434	475r	
REAL ESTATE LOANS (5/27) billions	\$400.7	\$402.6r	
MONEY SUPPLY, M2 (5/25) billions	\$3,413.4	\$3,417.8r	
INITIAL CLAIMS, UNEMPLOYMENT (5/23) thous.	407	403	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonal data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (May)	180.0	178.8	
BUSINESS WEEK LEADING INDEX (May)	213.7	213.1r	
EMPLOYMENT, CIVILIAN (May) millions	117.7	117.7	
UNEMPLOYMENT RATE, CIVILIAN (May) billions	7.5%	7.2%	

Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (5/25)	\$950.9	\$953.9	
BANKS' BUSINESS LOANS (5/27)	283.8	285.1r	
FREE RESERVES (5/27)	1,380r	488r	
NONFINANCIAL COMMERCIAL PAPER (5/27)	144.2	145.9	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed in two-week period in millions)

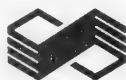
MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (6/9)	3.57%	3.89%	
PRIME (6/10)	6.50	6.50	
COMMERCIAL PAPER 3-MONTH (6/9)	3.93	3.98	
CERTIFICATES OF DEPOSIT 3-MONTH (6/10)	3.86	3.93	
EURODOLLAR 3-MONTH (6/6)	3.94	3.91	

Sources: Federal Reserve Board, First Boston



Native Californian
For 125 years
our promise has been our policy.



PACIFIC MUTUAL

800-800-7646

Pacific Mutual Life Insurance Company, 700 Newport Center Drive, Newport Beach, CA 92660. Pacific Mutual subsidiaries include: PM Group Life Insurance Company, Employee Benefits America, Pacific Financial Asset Management Corporation (PFAMCo), Pacific Investment Management Company (PIMCO), PM Realty Advisors, Inc., Cadence Capital Management Corporation, NFJ Investment Group, Inc., Parametric Portfolio Associates, Inc., Pacific Equities Network, Mutual Service Corporation, United Planners' Group, Inc.

In 1959, Mrs. C. Bechen of Dixon, Illinois, banged out 880 words in 5 minutes to put herself in the record books.



ScanMan® gets the job done in 2, and can put Mrs. Bechen into anything you like.



ScanMan.
Better, Faster Documents.

Don't re-type it—scan it directly into your computer!

ScanMan "reads" text in virtually any typeface, and pops it into your PC faster than any typist. 

 Even your word processing software won't know the difference! ScanMan also transfers photos and diagrams into documents in 256 super sharp levels of gray. And it comes with powerful image editing and retouching software. Scan large areas: Logitech™ AutoStitch software* automatically and seamlessly

stitches individual scans together. ScanMan can handle over twice the area a flatbed can scan, but costs a third of the price! For MS-DOS® or Windows.™

ScanMan comes in two highly-awarded and easy to use versions: Model 256 with Ocron Perceive™ Personal OCR software (\$549 list) for Windows 3.0 & 3.1; and Model 32 with Logitech CatchWord™

OCR software (\$359 list) for MS-DOS.

They're at your local dealer,  or call 1-800-231-7717.



Edit them
as you wish.



Run ScanMan
over text or images.



Produce better
documents, faster.



able with ScanMan Model 256 only.
®—Perceive is a trademark of Ocron Corp.
trademarks are the property of their
ered owners. Our thanks and congratulations to
Fornstall Widschlagler Bechen
ow lives in Brown City, Michigan.

Videoconferencing at a moment's notice.



You have a great idea.



You set your schedule.



You present your idea.

With SP Telecom's Media Express network, your next great idea is only minutes away from a videoconference. Media Express videoconferencing is that easy.

Unexpected meetings to discuss timely issues can be scheduled immediately. This gives your company an edge.

Even when you're not in a hurry, Media Express is still the best way to videoconference. One reason is our one-of-a-kind Automated Scheduler. Instead of using an operator, you simply choose the parameters for your conference through a PC interface.

You can schedule point-to-point or multipoint conferences. Plus, at a moment's notice, you can extend your videoconferences or end them early, and pay only for the minutes you use. Every conference has complete password security.

Plus, with Media Express you'll get detailed call records sorted by cost centers according to your particular needs.

Give your company a competitive edge with a true on-demand, reliable videoconferencing network. Call today and ask about Media Express. It's ready when you are.

1-800-229-7782.

SP
TELECOM Adding value
to your business
is our business

NOW DISAPPEARING AT A LOCATION NEAR YOU.



© Art Wolfe

These sea otters were once on the brink of extinction. They are doing better now, but hundreds of other species are in trouble.

Since 1951, The Nature Conservancy has protected millions of acres of habitat for threatened species in all 50 states. And in a novel way — we've bought it.

A good job . . . but not good enough. Time is running out. Whole species are vanishing every day.

So join us. Write The Nature Conservancy, Box CD0021, 1815 N. Lynn Street, Arlington, VA 22209. Or call 1-800-628-6860.



Conservation Through Private Action

TODAY IS THE FIRST DAY OF THE REST OF YOUR LEASE.

1992 Acura Legend



You've heard them all. *Carpe diem. Live life to the fullest. Make the most of every moment.* But you can't possibly grasp the full meaning of such expressions until you find yourself behind the wheel of a 24-valve, 200-horsepower Legend Sedan or Legend Coupe.

Which is why we recommend a visit to your Acura dealer. There, you'll have the pleasure of hearing about some extremely low monthly lease rates with some very flexible terms. Thanks to a leasing program that has been developed by the American Honda Finance Corporation, you could be parking a brand new Legend in your driveway in just a few hours. Of course, as you might have guessed, this opportunity, like time itself, is fleeting.

So, don't just sit there. Do something. Not tomorrow. Not the day after tomorrow. Not a week from now. See your Acura dealer or call 1-800-TO-ACURA for the name of your nearest Acura dealer.

And don't just seize the day.
Seize the lease.



ACURA
PRECISION CRAFTED PERFORMANCE

EDITOR'S MEMO

...NOW READ THE BOOK

IN-CHIEF: Stephen B. Shepard
MC EDITOR: John A. Dierdorff
OWNERS: William Wolman
MANAGING EDITORS: Dowling, Mark Morrison, G. David Wallace
EDITOR: Malcolm Frouman
EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, Dobrynski, Marc Frons, Geoff Lewis, Ciro Scotti, Vamos, Lee Walczak (Washington), Chris Welles, Zuckert
PAGE EDITOR: John E. Pluenneke
CORRESPONDENTS: Keith G. Felcyn
EDITORIAL EDITOR: William J. Holstein (Editor), Elizabeth Sr Editor
WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis, William Glasgal, Gene G. Marcial, Bruce Nussbaum, Trison, Karen Pennar, Otis Port
EDITORS: Duane E. Anderson, Catherine Arnst, Depke, Amy Dunkin, Peter Fincher, Jeffrey M. William D. Marbach
EDITORIAL OPERATIONS: Thomas J. Reed
EDITOR: Lawrence Lippmann
RT DIRECTOR: Laura Baer
OF SYSTEMS: Claire Conte Worley
CS: James C. Cooper (Sr. Economist/Business Outlook editor Madigan (Assoc.), Christopher Farrell, Michael J. Mandel s editors) Gene Koretz (Economic Trends editor)
ENT EDITORS: Books: Denise Demong Corporate Fin- ight Industries: Thane Peterson Information Pro- John W. Ventry International Editor: Joyce Barnathan News: Peter Galuska, Stanley Reed Investment Leah Nathans Spiro Legal Affairs: Michele Galen g: Christopher Power Markets & Investments: Gary edia: Mark Landler Money & Banking: John Meehan is Collingwood People: Michael Oneal Personal Busi- ald H. Dunn, Joan Warner Science: Emily T. Smith Score- red F. Jespersen Social Issues: Troy Segal Technol- ury Buderi Telecommunications: Peter Coy Trans- Andrea Rohman The Workplace: Aaron Bernstein
ORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodghill II, by, Suzanne Woolley, Laura Zinn Paul M. Eng (Asst. editor)
ORS: Harry Maurer (Deputy chief), Prudence Growther, Iercurio (Asst. chief), Tim Belknap, Mark Miller, Jack m Taub (Sr. copy editor), Pam Black, Carl Desens, Hardy ta Kaufman, Cynthia McClean, David Pengilly, Malka Percal, ifty, Gail Fowler, Dalia Kandyoti, Aida Rosario, Eva Stettner 'SI)
ION COPY EDITORS: Donald Halsband (Chief), Hallberg ion, Celine Keating, Robert S. Norman, Lawrence Dark, Romanoff
 in Taylor (Deputy director), Cynthia Friedman, Francesca ay Petrow (Assoc. directors), Alice Cheung, Craig Socia ctors) Graphics: Arthur Eves (Director), Joan Danaher irector), Rob Doyle (Sr. Illustrator), Laurel Dainis, na, Ray Vella (Illustrators), Jean Beauchamp (Computer unction: Stephen J. Romeo (Mgr)
 ue Bloom (Deputy Picture editor), Todd James, Scott Mlyn, ail (Assoc. Picture editors), Anne Murray (Asst. editor) yaly (Researcher) Bettina Baudoin (Researcher - Pans) (Traffic), Lawrence Crowe (Librarian)
OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne 'Production managers) Thomas R. Dowd, Sharon L. Eng, Jose L. Martin, Jane M. Perkinson, Craig Sturges, Karen V. Walton, Nicholas White (Makeup editors), Dale I. Arnold, y, Edgardo Torres (Asst. makeup editors) Donald C. rific manager), Bruce M. Arnold, Leo Corbie (Production
NDENTS: Atlanta: Chuck Hawkins (Mgr.), Walencia Konrad y, McWilliams, Geoffrey Ness Chicago: David Greeng y), Julia Flynn, Kevin Kelly, Lois Thermen Cleveland: hiller (Mgr.) Connecticut: Lisa Driscoll Dallas: Wendy r), Stephanie Anderson Forest Detroit: Kathleen Kerwin es B. Treece (Sr. Correspondent), David Woodruff Los onald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), a. Miami: Gail DeGeorge (Mgr.) Philadelphia: Joseph r) Pittsburgh: Michael Schroeder (Mgr.), Maria Mallory isco: Russell Mitchell (Mgr.), Richard Brandt, Joan O'C obert Hof, Kathy Rebello Seattle: Don Jones Yang (Mgr.) n: Stephen H. Wildstrom (Sr. News editor), Stan Crook y), Amy Borrus, Brian Bremner, John Carey, Paula Dwyer, Susan B. Garland, Howard Gleckman, Douglas Harbrecht, i, Mark Lewyn, Paul Magnusson, Mike McNamee, Tim erine Yang Christina Del Valle (Asst. editor) Bonn: John (Mgr.) Gail Schares Hong Kong: Pete Engardio Lon- d A. Melcher (Mgr.), Mark Maremont Mexico City: icker (Mgr.) Moscow: Rose Brady (Mgr.) Paris: Stewart ill Javetski, Jonathan B. Levine Rome: John Rossant yo: Robert Neff (Mgr.), Neil Gross, Ted Holden, Karen Toronto: William C. Symonds (Mgr.)
SERVICES: Broadcasting: Ray Hoffman Business Barbara Boynton Information Services: Jude T. Hayes Judi Crowe (Asst. editor), Fred Katzenberg, Elisa S Soong Office Manager: Rosalyn Kopit Public Rela- tions: Summerson, Josephine Coppola Readers Report: own Reprint Permission: Lawrence Clayton Systems: in (Mgr.), Courtney Eddy
John W. Patten
OPERATIONS: Gary B. Hopkins
VERTISING SALES: Karl A. Spangenberg
NATIONAL: Gerd Hinkle
ATION: Kitty Carrol Williams
OF OF MARKETING: Cara Erickson
 : Constante E. Bennett (San Francisco), G. Jarvis Coffin Region), Dan Dunn (Chicago), Molly F. Ford (Northeast-
R: Gary M. Singer
ADVERTISING BUSINESS: Linda F. Carvalho
PRODUCTION: Mario J. Talluto

Seven years ago, we set out to devise a reliable system to help you evaluate mutual funds. The result was an easy-to-understand rating, developed with Morningstar Inc., that reflects both long-term performance and the risk in various funds. Our first Mutual Fund Scoreboard, a 1986 Cover Story, was a remarkable hit—and it has been one of our most popular regular features ever since. We have steadily expanded the number of funds we follow, to more than 1,400. And we provide you with frequent coverage of funds, along with a quarterly performance update.

Now, we have published a second edition of BUSINESS WEEK's *Guide to Mutual Funds* (McGraw-Hill, \$14.95 paperback, \$24.95 hardcover). Written by Associate Editor Jeffrey M. Laderman, it tells you everything you need to know about mutual funds—from what they are and how they work to sophisticated strategies to maximize returns and minimize taxes.

The 186-page edition, fresh off the press, includes more than 80 tables and charts—plus the 1992 BW Mutual Fund Scoreboard, covering equity, bond, and closed-end funds. At a time when money is pouring into funds



(\$28 billion in equity and \$31.5 billion in bonds in the first four months of 1992), we are pleased to provide this useful investment tool. You can find it at your bookstore, or order it direct by calling 800 2 MCGRAW.

Stephen B. Shepard
 Editor-in-Chief

U.S. EXPORTERS NEED A UNIFIED TRADE AGENCY

In "An export boom is a terrible thing to waste" (Editorials, Apr. 13), you mention the need to energize the grab bag of American governmental agencies whose mission is to promote and finance exports.

The Commerce Dept. as now constituted is the "Confederation of Unrelated Agencies." The functions related to trade are spread out in 16 different agencies. Under the present system, unifying or coordinating activities is not likely to happen—since most agencies

are engaged in and preoccupied with turf wars.

The time is right for the establishment of an International Trade Administration such as other major industrial countries have. Senators William V. Roth Jr. (R-Del.) and John D. Rockefeller IV (D-W. Va.), separately, will soon be introducing legislation designed to create a unified agency, focused on the support of exports and responsive to the needs of exporters.

These initiatives deserve serious consideration, input, and support by the business community.

Your reference to the pork barrel that agricultural programs receive is vastly

BUSINESS WEEK
 JUNE 22, 1992 ***3271
 ISSN 0007-7135

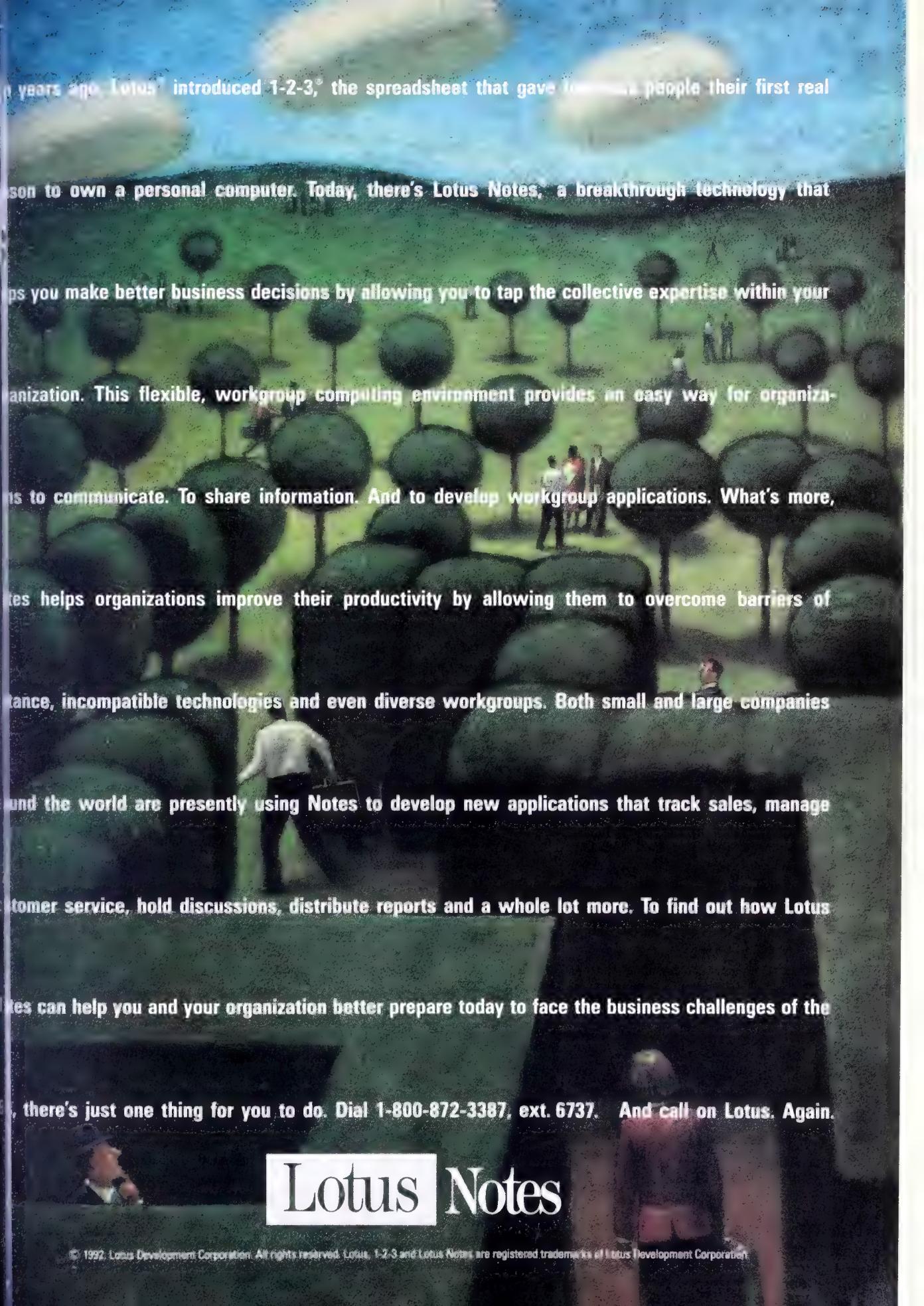


Publication of this report is subject to the terms and conditions of the McGraw-Hill Inc. Founder James H. McGraw (1860-1948).
 Editor: J. Edgar Hoover, Circulation and Advertising Office: McGraw-Hill Building, 1221 Avenue of the Americas, New York, N.Y. 10020.
 Telephone: (212) 512-2000 Domestic Telex: 127060 International Telex: 232365 Cable: McGraw-Hill New York, TWX 710-581-4879.
 First-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9010 Registered for GST as McGraw-Hill Inc. GST #R123075673 Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.
 Officers of McGraw-Hill, Inc.: Joseph L. Donne, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Pennglass, Senior Vice President, Treasury Officer.
 PHOTOCOPY PERMISSION: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for continued bulk reprint to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN 0007-7135/92/\$2.75

European Circulation Center, McGraw-Hill House, Maidenhead, Berks, England Telephone (0628) 23431, Telex 848640 Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520 Second-class postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Registration Number 9010 Registered for GST as McGraw-Hill Inc. GST #R123075673 Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Donne, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Pennglass, Senior Vice President, Treasury Officer.

LOTUS
GIVES YOU
A BETTER
WAY TO
WORK.
AGAIN.



Years ago, Lotus[®] introduced 1-2-3[®], the spreadsheet that gave thousands of people their first real reason to own a personal computer. Today, there's Lotus Notes[®], a breakthrough technology that helps you make better business decisions by allowing you to tap the collective expertise within your organization. This flexible, workgroup computing environment provides an easy way for organizations to communicate. To share information. And to develop workgroup applications. What's more, Lotus Notes helps organizations improve their productivity by allowing them to overcome barriers of distance, incompatible technologies and even diverse workgroups. Both small and large companies around the world are presently using Notes to develop new applications that track sales, manage customer service, hold discussions, distribute reports and a whole lot more. To find out how Lotus Notes can help you and your organization better prepare today to face the business challenges of the future, there's just one thing for you to do. Dial 1-800-872-3387, ext. 6737. And call on Lotus. Again.

Lotus Notes

Readers Report

understated. Agriculture gets \$1.97 billion in export-promotion funds, as opposed to \$195 million for the Commerce Dept.'s entire International Trade Administration.

Diversion of only \$200 million to \$300 million from agriculture could create the infrastructure needed to stimulate exports from 7% of gross national product to 10% by the year 2000. Let's get behind American exporters!

E. Martin Duggan
Executive Director
Small Business Exporters Assn.
Annandale, Va.

THE CAUSE OF SOFTWARE PIRACY IS HIGHWAY ROBBERY

Ido not condone pirating per se, but I believe you have missed an important point in your article "Fake windows, ersatz DOS, angry Uncle Sam" (Information Processing, May 18).

Consider that pirating does not mean just counterfeiting, such as exists in Taiwan, but also the making and passing on of copies, even within large corporations, to avoid purchasing a package for each PC in the organization.

David Curtis of Microsoft and Carla

Hills avoid mentioning the reasons for the existence of this type of pirating, particularly in Europe: gouging, exploitative pricing policies.

Any U.S. software sold through distributors or directly through European subsidiaries of major software houses costs double the price here.

Jean-Pierre Frankenhuys
Paris

CREDIT-REPORTING REFORM: EVERYONE IS A WINNER

Over the past two years, we have been working diligently to provide a much-improved service—giving prompt and readable copies of credit reports and toll-free access to several hundred information consultants, who are trained to treat consumers like valued customers, ("It's time to clean up credit reporting," Top of the News, May 18).

Equifax has also invested millions of dollars in new software-matching techniques that help improve accuracy, in privacy audits of our services and in major surveys conducted by Louis Harris & Associates of consumer attitudes about privacy.

We listened to Congress, the Federal

Trade Commission, consumers, advocacy groups. As a result, last year we decided to discontinue providing marketers with information from credit reports, because of our concerns about privacy.

We think the legislation that was introduced by Representative Estelle Torres (D-Calif.) is comprehensive and also effective in modernizing the Credit Reporting Act and improving standards for accuracy, privacy, and access to consumers.

There is legitimate disagreement about whether credit bureaus should be required to provide free reports. But people have not been adversely affected by credit decisions.

There is also legitimate disagreement about whether federal law should override state law on these matters.

But there should be no disagreement about whether the current legislation—with more than 40 new consumer protections—would be good for consumers, businesses, and our economic system. It would be.

C. B. Rogel
President of
Equifax
Atlanta

YOU CAN'T GET AWAY FROM US.

No matter where in the
world you need business insurance,
The Home can help.

Because business is getting more and more international, so is The Home Insurance Company. We're now an integral part of the Trygg-Hansa SPP Group, one of Europe's leading insurers. And we have agreements with major insurers around the world. The result is, one Home underwriter can handle virtually all your property-casualty insurance in most of the world's key markets. Ask your agent or broker.

Home Insurance
OLD PROS ON A NEW TEAM

WHAT'S BEHIND BANKRUPTCY LAWS

our commentary "Why Chapter 11 needs to be rewritten" (Finance, 18) misses sight of the key policies underlying our present bankruptcy law: reservation of going-concern values, author utterly ignores the goals of preserving jobs and avoiding impulsively ordering substantial organizational change, (2) achieving equality of distribution among creditors, and (3) avoidance of race of diligence among creditors to enable companies on shaky financial ground.

H. Jeffrey Schwartz
Chairman
Bankruptcy Dept.
Sch, Friedlander, Coplan & Aronoff
Cleveland

contrast to the deficiencies of Chapter 11 catalogued in your story, imagine reorganization proceeding in which independent trustee replaces management, investigates the causes of bankruptcy, decides whether to continue the process, and, if appropriate, proposes a reorganization plan that is presented to bankruptcy judge after being reviewed by the Securities & Exchange

CORRECTIONS & CLARIFICATIONS

In the story "Compaq declares war on the clones" (Top of the News, June 15), we reported incorrect results. The company earned \$455 million in 1990 and \$131 million in 1991.

"Hanging tough in a natural-gas glut" (Industries, May 25) identified Consumers Power Co. as Michigan's largest utility. Consumers, a subsidiary of CMS Energy Corp., has more customers than Detroit Edison Co. But Detroit Edison's revenues of \$3.6 billion last year were higher than the \$2.9 billion for CMS.

Commission for fairness. This was Chapter 10, crafted in 1938 by William O. Douglas and Abe Fortas when they were at the SEC.

Chapter 10 was our bankruptcy reorganization law for 40 years, adopted because, in reorganizations prior to 1938, as the SEC said, "the debtor remains in possession, a strange and novel privilege in a bankruptcy proceeding... remains in dominance of the situation... meets only casual scrutiny, its plan is adopted, it does not account."

In 1978, Chapter 10 was scrapped in

favor of Chapter 11, which kept in place a management generally distrusted by creditors. It gave management the right to file a plan to keep itself in power and then gave the duty to investigate management to the creditors' committee. I cannot think of a better recipe for contention and litigation.

In the end, Chapter 11 just gives two warring powers a battleground, with the expenses of their gladiators picked up by the stockholders and creditors.

I do not think it is just nostalgia as a former bankruptcy judge that leads me to conclude that fewer reorganizations would be filed if management were replaced and that less litigation would ensue if committees' powers were curtailed and instead an independent trustee conducted investigations and filed a reorganization plan.

That was the system, and those were there results for four decades. It might be well to reconsider Chapter 10 today.

John J. Dilenschneider
Squire, Sanders & Dempsey
Columbus, Ohio

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4464, Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

SUMMER READING FOR THE PROFIT MINDED

QUALITY IN ACTION

Lessons in Leadership, Participation, and Measurement

Patrick L. Townsend and Joan E. Gebhardt

01-55206-2, 304 pp., \$24.95

Leading quality gurus bring you a road map to total quality management that keeps you on track with nuts-and-bolts methods and innovative techniques.

Published by John Wiley & Sons, Inc.

THE BALDRIGE

What It Is, How to Win, and How to Use It to

Improve Quality in Your Company

Christopher W. L. Hart

02-026912-2, 288 pp., \$24.95

Practical tools for improving quality and guidelines for winning the most prestigious award in corporate excellence from one of the Baldrige's own examiners!

Published by Business McGraw-Hill

BARGAINING ACROSS BORDERS

How to Negotiate Business Successfully

where in the World

Jean Allen Foster

02-021647-9, 224 pp., \$24.95

How-to guide for negotiating successfully anywhere in the world. Packed with proven strategies for leaping cultural barriers from Latin America to the Pacific Rim.

Published by Business McGraw-Hill

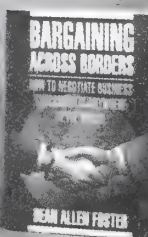
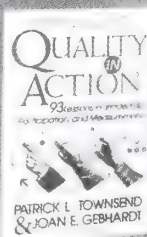
THE PORTABLE MBA IN MARKETING

Alexander Hiam and Charles Schewe

1-54728-X, 448 pp., \$24.95

The skills, concepts, and power of an MBA in marketing—without the time and cost! Covers market research, sales forecasting, product development, and more.

Published by John Wiley & Sons, Inc.



ALL THE BEST BOOKS FROM ALL THE BEST PUBLISHERS

Clip or copy this coupon and fax or mail to:

McGraw-Hill Bookstore, 1221 Avenue of the Americas, New York, NY 10020

Fax: 212-512-4105; Tel: 1-800-352-3566 in New York City 512-4100

Fax or phone orders delivered within 10 days!

YES! Please rush me:

Qty.

Quality in Action

ISBN 0-471-55206-2 • \$24.95

The Baldrige

ISBN 0-07-026912-2 • \$24.95

Bargaining Across Borders

ISBN 0-07-021647-9 • \$24.95

The Portable MBA in Marketing

ISBN 0-471-54728-X • 448pp. • \$24.95

Check, money order, or credit card only:

☐ Visa ☐ AMEX ☐ MasterCard

Account No. _____ Exp. Date _____

Name _____

Address _____

City _____ State _____ Zip _____

Please add applicable sales tax, plus \$2.50 for U.S. postage and handling.

BWD-692

THE MCGRAW-HILL BOOKSTORE—SERVING TODAY'S PROFESSIONALS

COSTING THE EARTH

By Frances Cairncross

Harvard Business School Press • 341pp • \$24.95

CHANGING COURSE

By Stephan Schmidheiny with the

Business Council for Sustainable Development

MIT Press • 350pp • \$35

REAPING THE SPOILS— WITHOUT SPOILING THE EARTH

Despite all the photo ops and the extravagant eco-speak surrounding the U.N. Conference on Environment & Development, the agreements signed in Rio de Janeiro are unlikely to have a dramatic or immediate effect on business. But one outcome of the Earth Summit is already clear: It has helped legitimize sustainable development, a controversial concept to integrate environmental protection and economic development that has far-reaching implications for business. At the core of the idea are the interlaced goals of alleviating poverty in developing nations and the widespread adoption of technology that curtails pollution and resource consumption everywhere.

Several dozen books on sustainable development were pumped out in time for Rio. But few offer clear enough prose to help business understand the ins and outs of reconciling development and environment. *Costing the Earth* by Frances Cairncross and *Changing Course* by Stephan Schmidheiny help fill that void. The authors, both Europeans—a journalist and a tycoon, respectively—do a handy job of explaining how business can implement and profit from sustainable development.

Make no mistake, one is entering a difficult, jargon-strewn arena. Big and complex new ideas must be grappled with and thrown to the mat. Cairncross and Schmidheiny may be the best sumos around, but don't expect an easy time.

Cairncross, the environment editor of *The Economist*, endorses the argument that environmental ills are, in large measure, caused by a failure of the markets. For the most part, the environment is what economists call an "externality." The economic benefits of ecosystems—a forest that protects soil from erosion, for instance—and the costs to society of pollution aren't reflected in the prices of goods and services. One reason is that on a planet dominated by market economies, such elements as the atmosphere and the fish in offshore waters are owned by no one, and therefore are vulnerable to polluters and exploiters. If no one owns migrating tuna, for example, there's no incentive to harvest them sensibly. Ditto for tropical forests, where the trees often first come, first chop.

Cairncross suggests expanding property rights to cover certain wildlife and other natural resources. She cites, with approval, a recent experiment in northern Zimbabwe where the central government gave the local people the right to manage the region's wildlife—and to keep the profits. Now, they have an incentive to conserve wildlife for safari hunting, tourism, and sustainable harvesting. A big part of her mission is setting a value on otherwise wild or free resources and ecosystems. In doing so,

deed, a good many experts consider tax on the carbon content of fossil fuels to be the most practical way to promote renewable energy and energy efficiency. Already proposed for the European Community, such a tax could be part of international efforts to cut carbon dioxide emissions, the chief culprit in any potential global warming.

Changing Course deals with the same themes but from a different perspective. It represents a manifesto of sustainable development from what might be described as the progressive quarter of the industry. Schmidheiny, the fourth-generation scion of one of Switzerland's wealthiest entrepreneurial dynasties, was charged by Maurice Strong, secretary general of the Rio Summit, with drawing up a business position on the subject for the conference. Strong convened the Business Council for Sustainable Development (BCSD), an assembly of 50 CEOs from such companies as N



she bashes away at ill-considered government policies such as subsidies for oil drilling, logging on public lands, and growing commodity crops. These subsidies, she says, have hindered energy conservation, accelerated the clearing of tropical forests, and promoted the sort of farming that does the land no good.

For the most part, Cairncross favors the use of so-called market incentives created through government intervention to compensate for market failures. Chief among those incentives are "green" taxes, or charges on polluting activities. Thus, Cairncross is part of a growing coterie of economists and policy makers who support market incentives to correct environmental problems. They contend that conventional pollution-control regulations are too costly and fail to promote adequately two of the pillars of sustainable development: pollution prevention and efficient resource use. In-

Motor, 3M, Dow Chemical, Volkswagen and the Royal Dutch/Shell Group.

"The requirement for clean, equitable economic growth," asserts Schmidheiny, "remains the biggest single difficulty within the larger challenge of sustainable development. Proving that growth is possible is certainly the greatest test for business and industry."

Schmidheiny is an optimist. He works hard to make the case that sustainable development, which would require industry to slash dramatically pollution and resource use, can also create market cut costs, and spur technical innovation.

He backs up his theories with studies detailing the difficulties in reaching "eco-efficiencies." One example is Volkswagen's mind-boggling pilot project to design cars for disassembly and recycling. How S. C. Johnson in Racine, Wis., enlisted suppliers to help eliminate toxic materials from its cleaning prod-

Plain Paper Laser Fax. Or Plain Paper Inkjet. With the Panafax product line, it's your call. 1-800-843-0080.



OK. You like the idea of a plain paper fax. But which technology? And which features?

Panafax® facsimiles make it easy to match the right fax to the right job.



Our full line offers affordable inkjet and high-productivity laser plain paper fax machines for any size business.

Our **UF-311** inkjet is quite possibly the best value for your money on the market. It offers high resolution, 12-page memory, a 20-page auto-document feeder, and automatic fax/phone switch with a TAM interface.

The Panafax **UF-312** inkjet adds a 28-page upgradable memory and semi-dual access that allows more than one person to use the fax at a time.

Our **UF-733** brings super-fine laser print quality within reach of most budgets.



And adds features like a 20-page upgradable memory, a 30-page ADF, and a large-capacity paper cassette.

Our Panafax **UF-766** laser fax is ideal for busy departments. It offers full dual access which allows

you to fax even when the machine is busy sending or receiving. With 3-second quick-scan, a fast six-second transmission speed, a 50-page upgradable memory, and two paper cassettes.

We even make finding the right dealer easier — with a toll-free number. Why not call it now?

1-800-843-0080, ext. 1115.

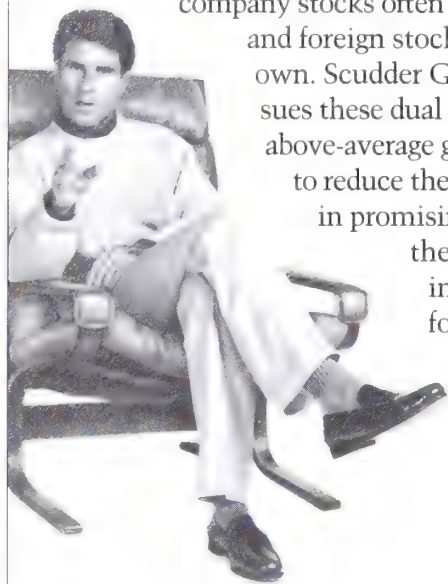
*Facsimiles, Computers, Printers,
Peripherals, Copiers, and Typewriters.*



All references to memory capacities and transmission speed are based on CCITT Test Chart No. 1. The UF-766 uses a CCITT 14.4 Kbps modem.

"A double opportunity for above-average growth...that's why I'm in this Fund."

If you're in the market for stocks, consider this. Small-company stocks often outperform large-company stocks, and foreign stock markets often outperform our own. Scudder Global Small Company Fund pursues these dual opportunities, providing you with above-average growth potential. While seeking to reduce the inherent risks,* the Fund invests in promising small companies, searching the world's established and emerging markets for them. Call today for free information.



**Scudder Global
Small Company Fund**
1-800-225-2470 ext. 2674
SCUDDER

America's First
Family of No-Load Funds



*Small-stock investing entails above-average risk. The special risks of global investing include currency exchange fluctuation and emerging-market volatility. Contact Scudder Investor Services, Inc., Distributor, for the Fund's prospectus, which contains more complete information about management fees and other expenses. Please read it carefully before you invest or send money.

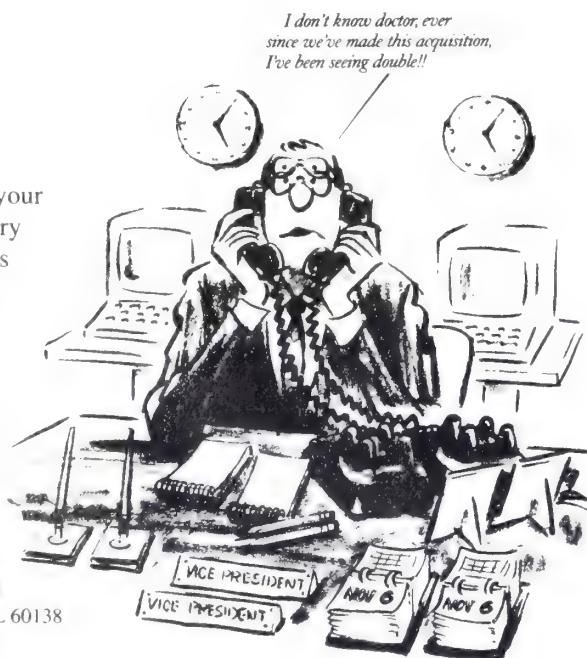
Turn your
excess inventory
into a substantial
tax break and
help send needy
kids to college.

Call for your
free guide
to learn how donating your
slow moving inventory
can mean a generous
tax write off
for your company.

Call 708-690-0010
Peter Roskam
Executive Director



P.O. Box 3021, Glen Ellyn, IL 60138
FAX (708) 690-0565



Excess inventory today...
A great opportunity tomorrow

Books

ucts could serve as a road map for companies that can't do it all themselves.

Poverty in developing nations leads to environmental abuse—from rain forest sacrificed for cheap fuel and agricultural to water pollution unchecked by sewage facilities. *Changing Course* takes pains to emphasize the role companies can play in creating jobs, transferring green technology, and conserving resources. Pulpmaker Aracruz Celulosos is cited as a good example of how job creation and resource management can be fused. When it took over 507,500 acres of degraded Brazilian rain forest, it preserved about 27% of the original stand, then reclaimed the logged-over portion for a tree plantation and pulp mill that provides some 7,500 jobs.

Success in these endeavors, of course, doesn't come easy. Readers can marvel at the persistence shown by Smith & Hawken, the California-based mail-order company, in its two-year effort, prolonged by false starts, to find a source of teak that could be harvested sustainably to make furniture.

Like Cairncross, Schmidheiny blames much environmental damage on subsidies and other forms of free-market leech. But he also blames free-market capitalism for promoting short-term thinking and investment strategies that are antithetical to sustainable development. In a series of recommendations that might surprise some readers, Schmidheiny and his business colleague on the BCSD call for eventually phasing out subsidies for resource extraction in agriculture. They support, at least in theory, the principle that polluters should pay for their damaging activities—and do so through such market incentives as green taxes. Yet while Schmidheiny also argues that trade liberalization is essential to prosperity in developing nations, he makes it clear that free trade sometimes conflicts with environmental protection. And he admits that the means for reconciling these conflicts is unclear.

Both books are written from a distinctly European outlook. American readers may recoil at the wholehearted approval of government-engineered incentives. And both books reinforce the perception that sustainable development currently raises more questions than answers. But they provide a starting point to discuss the concept's implications. Managers with time for just one, pick *Changing Course*. Its comprehensive, straightforward treatment of the issue from a business vantage point is more likely to address their concerns.

BY EMILY T. SMITH

Emily Smith covers the environment for *BUSINESS WEEK*.



As always the welcome was warm from the staff who called me by name. The Peninsula had always been the personal retreat of the world's most celebrated travellers. And now it was mine. Turning the key in the lock, Kwan Ling opened the door to the room I knew so well. At that moment it was as if I belonged nowhere else but back in the suite they call the Moon Pearl.

The Peninsula Hong Kong

SHARE THE EXPERIENCE



RELATIONSHIP
BANKING
IS MORE THAN
"LET'S DO LUNCH."

It was out during the transaction-driven 80's, it's in again now.

Relationship banking was never out with us.

Whether you come to us for business banking or personal banking, we take the time and trouble to understand your situation and help you clarify and reach your goals.

To enhance our ability to serve our customers, we recently added more than \$1.5 billion to our already strong capital base, for a total of \$9.0 billion.

Combining this capital strength with intellectual currency—the knowledge our people bring to their work every day—we structure the right solutions for you.

 **CHEMICAL**



We apply our strengths to propel smart ideas from concept to market; to raise corporate funds or invest them; to help growing companies find new ways to grow; to multiply personal assets; to create ever more responsive and cost-efficient operating services.

The new Chemical is first in primary relationships with U.S.

corporations and first in serving middle market companies.

We have a relationship with one out of every three households in the metropolitan New York market, and we're lead bank to one of every three small companies, too.

In short, we use all our resources to build long-term relationships of trust, one successful transaction after another.

INTELLECTUAL CURRENCY. CAPITAL STRENGTH.SM

A TICKET OUT OF THE INNER CITY

BY GARY S. BECKER



Most voucher plans for education just offer a choice of schools. This one—open to dropouts and grads alike—would give disadvantaged kids access to marketable job skills

Many explanations of the Los Angeles riots have been proposed, and I am not going to add to the list. Whatever the underlying causes, the riots highlighted the need to integrate many more ghetto youths into the economic system. I believe the best way to do this would be through the equivalent of a "G. I. Bill" for ghetto youth, financed by state and local government.

Under such a plan, all young people from ages 14 to 19 in eligible families would receive vouchers from local and state governments. Until age 16, these could be spent only at high schools of the student's choice, as in many education-voucher plans. Parochial and other private high schools would be eligible to participate, since they provide better education than do public schools in the inner cities.

To limit the cost of the program, initially only children in poorer families would be allowed to participate. Middle-class children already receive reasonably good schooling and training since they have access to schools in suburbs and smaller towns and know more about how to get better jobs.

The usual education-voucher proposals would not help the many inner-city youths who get little out of high school, even if better schools become accessible to them. And they do not guarantee that students who finish high school will have useful skills to help integrate them into the workplace. For it is the limited skills of inner-city youths, much more than racial or other discrimination, that handicap them in the competition for jobs.

WAGE DIVE. One need only cite the depressing statistics on trends in real earnings: The wages of high school dropouts and the bottom fourth of graduates have fallen by more than one-quarter since 1975. The decline in these categories applied as fully to whites as to blacks and other minorities, but a much larger percentage of blacks and Hispanics drop out of school or do poorly in high school even when they graduate. It is fashionable to blame the Reagan and Bush Administrations for this trend, but the decline began under President Carter. Less well-trained workers are also doing badly in several European countries.

Under the system I am proposing, participants who drop out of high school before finishing could use vouchers until age 19 to get on-the-job training in the private sector. Those who finish high school would have a year's worth of vouchers that could also be used for additional training, either on a job or at a trade school that teaches marketable skills, such as computer programming or carpentry. To prevent these schools from using exaggerated claims to attract students, their continued

participation would be contingent on placing most of their graduates in jobs that pay at least a specified amount per hour, or more than a certain percent above the minimum wage.

It is essential to include on-the-job training in the program, since on-line training is especially important for ghetto and other youngsters. Their economic problems are primarily caused by difficulties in getting access to promising work situations. Eligible companies would have to provide details about training programs, including information about the kinds of job ladders available to successful participants.

MORE BANG FOR THE BUCK. The average public school in the U.S. spends over \$5,000 per student each year. Yet many parochial and other private schools provide better education with much smaller expenditures per student, and trade schools usually spend only a fraction of what public schools do. A generous voucher system could cost only half what is spent by public schools—even less than those in on-the-job and trade-school training programs.

Housing & Urban Development Secretary Jack F. Kemp, Representative Charles B. Rangel (D-N.Y.), and others are advocating federally subsidized enterprise zones for inner cities. I believe these zones are a mistake, because the subsidies would become part of the political pork barrel and would not meet the real problems facing ghetto youngsters. Black males from the inner city generally lack the skills to qualify for well-paying jobs, even if these jobs were located in plants in their neighborhoods. By contrast, Koreans and many other immigrants living in the inner city are able to do manage to get good jobs precisely because they have valuable skills and work habits.

A five-year voucher system for poor teenagers would put further pressure on state and local government budgets at a time when the finances are already in bad shape. However, government spending on students who use vouchers at private schools, at trade schools, and for on-the-job training instead of attending public schools would be greatly reduced. This is because the average cost of a voucher would be much less than per capita spending on public school students.

Moreover, an extensive schooling and training program for poor youth is well worth undertaking even if it adds to the strain on local government budgets, for it gets to the heart of the economic difficulties faced by young people. No one program can solve the problems of inner cities, but this one can improve employment prospects among the young who most desperately need better job skills.

GARY S. BECKER IS PROFESSOR OF ECONOMICS AT THE UNIVERSITY OF CHICAGO AND A FELLOW OF THE AMERICAN ECONOMIC ASSOCIATION.



BUSINESS AND GOVERNMENT WORK BEST WHEN WE WRESTLE WITH PROBLEMS. INSTEAD OF EACH OTHER.

Great things can happen when business and government become friends instead of enemies. In the states of Arkansas, Louisiana and Mississippi, Entergy Corporation works with state and local governments to promote the region and bolster its economy. Together, Entergy and local

government are sponsoring a number of innovative programs that are helping to bring businesses, jobs and prosperity to the area.

The challenges of our region are best met when business and government work together. To learn how Entergy is helping to meet those challenges, contact the

Regional Development Department,
Entergy Corporation, P.O. Box 61005,
New Orleans, Louisiana 70161.
Phone (504) 569-4723.



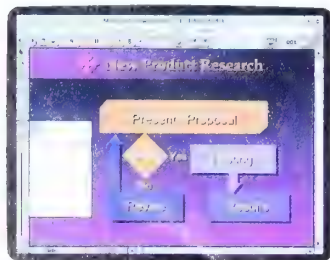
ENTERGY

Entergy is an investor-owned electric energy company serving more than 1.7 million retail customers in Arkansas, Louisiana and Mississippi. Entergy also provides wholesale electricity to other utilities nationwide and markets its expertise in energy and technical management worldwide. Our headquarters address is P.O. Box 61005, New Orleans, Louisiana 70161.

Mary Sue Will You

PowerPoint 3.0. Because deserves a great pr

It's been said that the most valuable currency in the '90s will be



With our unique Shape Tool, you needn't be an artist to easily create terrific diagrams that result in eye-catching, professional overheads, 35mm slides or on-screen presentations.

ideas. But having an idea and communicating an idea are two entirely different things. Which brings us to our point. Or rather, PowerPoint. How do you turn your ideas, the points that you want to make, into powerful, convincing presentations?

Consider Microsoft® PowerPoint® presentation graphics program for



great idea presentation.

Windows™. It will, most immediately, help you get your ideas down, and then help you organize exactly what it is you want to say. Secondly, it will assist you in making sure all your presentation materials not only look great, but make a very strong business impression as well. Let's begin with ideas. First

you want to get them down. With PowerPoint, you can work out your entire presentation in Outline View. Or you can develop your thoughts right on your slides. The next step is to graphically express those ideas. With PowerPoint, your choices are astounding. Over 150 templates you can easily apply at any time to give your presentation a professional look. A Shape Tool that lets you easily create diagrams from a palette of commonly used shapes. Plus 84 styles of graphs, including 3-D graphs that rotate. And with the Slide Master feature, you can easily make last-minute changes to your master slide (like adding a logo, for example), and all your other slides will automatically change. So only one change is necessary.

Now everything is in place. Everything makes sense. Everything looks terrific. So go ahead. Feel confident about your presentation. After all, now it's as great as your ideas.

If you'd like to hear more about the PowerPoint program, including our 90-day money-back guarantee, call (800) 541-1261, Dept. A24. Or visit your nearest Microsoft reseller.



PowerPoint takes full advantage of new Windows 3.1, and is a part of Microsoft's family of integrated software products for the Windows operating system.

Microsoft
Making it easier

BY GENE KORETZ

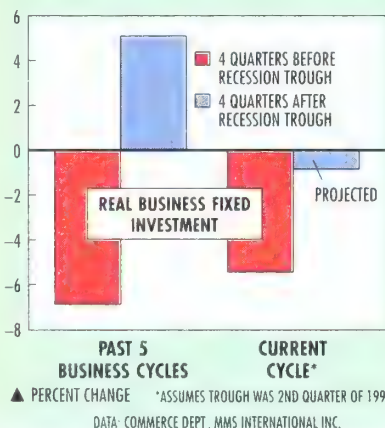
BLAME THE WEAK RECOVERY ON WEAK INVESTMENT

The current business cycle has been nothing if not unique. Gross domestic product has now posted positive growth for four straight quarters, suggesting that the economy emerged from recession early in the second quarter of last year. Yet most economists argue that the recovery did not really begin until the first quarter of 1992.

Statistics tell the story: The economy usually takes off like gangbusters in the first year of a recovery, growing at an average 5%-to-6% clip. Yet its annual growth rate in the final three quarters of 1991 averaged less than 1%.

Why this near-comatose performance? Though most observers blame lagging

THE LAGGING PACE OF INVESTMENT SPENDING



consumption, economist Michael R. Englund of MMS International, a McGraw-Hill Inc. subsidiary, argues that "weak investment, rather than consumption, deserves much of the blame."

Englund points out that consumers continued to shell out a large percentage of their incomes for goods and services after the economy hit bottom early last year, indicating that they remained willing to spend despite large debt loads, tight credit, and worries about the future. The difference from most past cycles, he says, is that income growth failed to accelerate—a development he attributes to "an unusual sluggishness in fixed investment."

By Englund's calculations, real fixed investment by business expanded by an average of 5% in the first four quarters of past cyclical upturns. Yet such outlays fell by 1.4% in the past three quarters

and are projected still to show a four-quarter decline of 0.8% when this quarter's results are in (chart).

"Had investment posted its normal 5% rise in the past year," says Englund, "GDP would have grown nearly twice as fast as the numbers now suggest—if you count the secondary effects of higher investment and incomes on consumption and inventory accumulation."

The good news, according to economists such as Englund and Michael Montgomery of DRI/McGraw-Hill, is that real business investment finally appears to be picking up steam. Although such outlays rose at an unimpressive 1.7% annual rate last quarter, the government's latest capital-spending survey indicates business plans a 6% rise for the full year. And nondefense capital-goods orders were up a healthy 10.4% over their year-earlier level in April.

Arguing that higher investment will help boost economic growth substantially in coming quarters, DRI is urging its clients to climb on the capital-spending bandwagon. Capital costs are now lower than in Japan, notes Montgomery, and U.S. goods are highly competitive on world markets. "With operating rates already relatively high," he warns, "companies that defer capital projects may find themselves at a disadvantage in the coming global economic expansion."

A LOAN AT LAST: BANKS SEEM TO BE EASING UP

The credit crunch is over, says economist Maury N. Harris of PaineWebber Inc. He notes that the Federal Reserve's May survey of loan officers at large banks around the country reveals that only a few are reporting tighter lending practices while about as many are starting to ease standards. "The lack of reports of tightening is highly significant," says Harris. "History indicates that banks are reluctant to report an easing even in strong recoveries, because they don't like to tell regulators they're lowering lending standards."

While commercial and industrial loans are still declining, Harris points out that the Fed's May report indicates that loan demand is strengthening for small and midsize business borrowers, while large borrowers seem to be obtaining loans outside the banking system. What's more, the Fed reports that nearly 20% of banks were more willing to make consumer loans than three months ago, compared with fewer than 2% that were less willing.

"With debt burdens down for both

businesses and households, interest low, and lending standards easing," Harris, "corporations and consumers are finally in a position to start venting pent-up demand."

NERVOUS TEENS HAVE UNEMPLOYMENT IN A TIZZY

Instead of being spooked by last month's rise in the unemployment rate to 7.5%, get set for a decline in coming months. So advises economist John Carson of Dean Witter Reynolds, who notes that all of the May rise was the result of a strong increase in the labor force of more than 330,000 job-seekers and that nearly half of that group was 16 to 24 years old.

The anomaly, says Carson, is that the youth population has been shrinking since 1980, and the May rise in job-seekers was the first in that market in five years. Moreover, the Labor Dept. recently predicted that the 16-to-24-year-old labor force would be about 480,000 lower this summer than last—a result of continuing declines in both their numbers and labor force participation. "Apparently, all the bleak reports about the lack of summer jobs prompted many youths to start looking for work early this year," speculates Carson.

If that's the case, the youth labor force will decline sharply in June and July. And that, says Carson, should help push the jobless rate down.

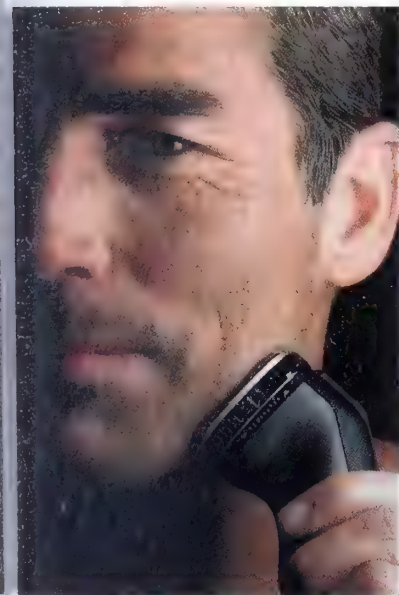
WHAT'S BEHIND SLUMPING SALES OF IMPORTED CARS

Sales of domestically produced cars surged from a 5.9 million-unit annual pace in April to a 6.3 million-unit rate in May, while imports stayed flat at 2.1 million-unit rate. That's the second straight month that imports have lost market share, prompting some analysts to conclude that the increasing competitiveness of U.S. nameplates is finally paying off in the marketplace.

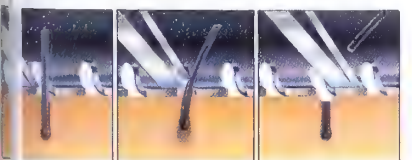
Economist David H. Resler of Norra Securities International Inc. adds another possible explanation. A larger portion of imports are high-priced luxury cars, he notes. And according to the Labor Dept.'s household employment survey, some 878,000 managerial and professional workers have lost their jobs so far this year—"exactly the group of well-paid workers who are likely to buy high-priced imports."

TO FULLY APPRECIATE NORELCO'S INCREDIBLY CLOSE, COMFORTABLE SHAVE, YOU HAVE TO LOOK BENEATH THE SURFACE.

It's amazing, but true. Norelco® can actually shave *below* skin level. And equally amazing, Norelco can shave you without the blades even touching your skin.



This feat is accomplished with a patented technology unique to all of shaving. The "Lift and Cut"™ system. Here, a precision



Shaver enters the skin. Lifter raises the hair. Blade cuts hair which then drops below skin level.



mechanism has been engineered by positioning a lifter in front of the blade. When the lifter notches into a hair, it lifts it up. As the blade cuts it, the hair shaft can actually drop back *below* the skin.

The result is an incredibly close shave. And because you can shave without the blades even touching your face, it's incredibly comfortable.

Try the Norelco. And experience the deep satisfaction of a perfect shave.



Norelco®

We make close comfortable.

© 1991 Norelco Consumer Products Company, A Division of North American Philips Corporation, Stamford, CT 06904



Virtually any business day of any week, Gulfstream IVs are seen waiting on the ramps of airports serving the major business, financial and government centers of Europe.



The range and speed of the Gulfstream IV make it ideally suited for comparatively long distances involved in most business and government travel in the Pacific rim.

Global access and the are synonymous.

It is interesting to contemplate how many other business jet manufacturers seem to have discovered the world lately.

The fact that they are now advertising the "global" capabilities of their airplanes, of course, simply reflects their anxiety to capitalize on the changing perspectives of business as a whole.

For many major corporations, a worldwide search for opportunities has become not merely a quest for growth, but perhaps survival.

This search is also triggering deeper change. Corporate strategies to achieve global objectives are reshaping virtually everything we thought we knew about the business of doing business. If this weren't enough, the once-familiar world order is in economic, political and sociological upheaval.

And yet, for all the astonishing speed with which it is changing, the global arena is one in which deliberate, face-to-face communications between principal decision-makers are more vital to success than ever before.

That should not be surprising.

Whether it is at home or abroad, in business or in

government, personal involvement is still the constant in assessing and managing challenges. Nothing takes the place of being there and seeing things for yourself.

Which brings us back to those other business jets and our thoughts about them.

Any airplane can take you from Point A to Point B. The farther the distance between those two points, however, the more capable the aircraft has to be. If they are continents apart, it is imperative that the machine satisfies the most demanding criteria for size, range, speed, airport performance, engine reliability and systems dependability.

No airframe manufacturer knows more about designing and building business airplanes with all this in mind than we do.

Worldwide business flying was pioneered and proven by our Gulfstream II business jets throughout the 1970s.

The global reach of the Gulfstream III, demonstrated so convincingly during the 1980s, is no less true in the 1990s.

Today's Gulfstream IV, with range, speed, size

We invite you to send for "Operating Business Aircraft: Financial Benefits and Intangible Advantages," a highly informative and objective look at how and why the investment in corporate aircraft such as the Gulfstream IV can return important dividends to your organization in terms of productivity and increased management effectiveness. To receive your free copy, write on your letterhead to Gulfstream Aerospace Corporation, Marketing Services, Mail Station B-04, P.O. Box 2206, Savannah, Georgia 31402 U.S.A.



Gulfstream IV's are familiar visitors at airports throughout the Middle East, and nearly every nation in the region takes advantage of Gulfstreams to conduct its affairs.



The Gulfstream IV reduces the distance between Australia and the United States to one stop, compared with the two or more stops required by other business aircraft.

Gulfstream IV

Flight management technology superior to anything on the market, is almost universally regarded by aviation professionals as the finest aircraft of its type. This amazing business jet can fly you and 8, 10, 12 more of your key executives and staff nearly 5,000 statute miles non-stop, equalling or exceeding commercial airline timetables. It gives you global access with uncompromised timeliness, convenience and security.

It can also fly short trips efficiently and cost-effectively. You can go to places where airline service is either impractical or impossible, often visiting several locations in a single day, optimizing your time and energies.

In short, the Gulfstream IV has an uncommon

versatility that makes it uncommonly productive.

Which brings us back to the idea of being there and seeing things for yourself.

We invite you to take a first-hand look at the Gulfstream IV on an actual business trip you and your key executives need to make somewhere in the world.

You see, more than 150 of these remarkable machines are at work today, flying your peers wherever their business takes them, at home or abroad. A full-scale demonstration trip can show you the advantages they already enjoy, while you discover what global capabilities in a business jet are all about. Robert H. Cooper, Senior Vice President, Gulfstream Marketing, is the person to talk to. Call (912) 964-3234.



The Gulfstream IV.

*Uncommonly versatile,
uncommonly productive.*

"The man who said the world will beat a path to your door if you build a better mousetrap was a poet, not a businessman.

The landscape is strewn with the wreckage of fine companies who built great products—that no one ever heard about.

"Most of our competitors of 1981 no longer exist. Some of them had great products. What they forgot to have was great advertising."



John Sculley, Chairman and CEO, Apple Computer, Inc.

I've worked for two of the most spectacularly successful corporations in America—Pepsi and Apple Computer. They're as opposite as East and West. But they have one thing in common. In both cases, advertising played a central role, rocketing them from obscurity to market leadership.

Each enjoyed product advantages. But they had to be advertised.

No other form of communication allows a purer, more powerful articulation of your product's story and your company's vision. Because only advertising can communicate not just information, but emotion and soul.

Something magical happens when you're able to touch millions of people at once—a transforming energy that not only makes sales today, but reverberates for years to come.

Advertising builds brands. And your brand is the only thing that stands between you and commodity pricing.

Advertising allows you to take on the giants and win. Goliath may not need great advertising. But David sure does.

Finally, advertising lets you express not only what you are, but what you are

trying to become. It's not just a selling tool, it's a leadership tool—a flag on the mountain to rally and inspire your own people.

Of all the sophisticated tools available to marketers today, advertising remains one of the most powerful."



American Association of Advertising Agencies

If you would like to learn more about the power of advertising, please write to Department D, AAAA, 666 Third Avenue, New York, New York 10017, enclosing a check for five dollars. You will receive our booklet *It Works! How Investment Spending in Advertising Pays Off*. Please allow 4 to 6 weeks for delivery. This advertisement was prepared by BBDO, Los Angeles, photograph by Peter Stember.

TAKE HEART. THE JOB MARKET REALLY FLASHING GREEN

This business cycle has produced some frustrating, often mystifying, twists and turns. But through it all, payroll figures have been the best guidepost to the economy's true path. The latest word from the labor stats is that a bona fide recovery is finally unfolding and that the upturn is slow and well behind the pace of normal postwar rebound (page 86).

GROWTH GETS BACK ON TRACK

NONFARM PAYROLLS



Fresh data from the Labor Dept. show that payrolls are expanding, but not by enough to bring down the unemployment rate. Despite growth in service jobs, cost-cutting by many service producers is holding back gains. And after getting burned by last year's aborted recovery, manufacturers are still hesitant to bring back workers.

But take heart. Nearly all signs from the labor markets are flashing green. New claims are on a downward trend. Factories are logging such long hours that new hiring in coming months seems assured. And surveys by both Dun & Street Corp. and Manpower Inc. show that companies plan to beef up payrolls in the third quarter—considerably so, according to the D&B survey. Though job markets aren't going to sizzle this summer, employment growth should be sufficient to keep consumer incomes—and spending—on the rise. That's the further output gains, as businesses restock their inventories. It also implies that companies will have the cash flow necessary to carry out their capital spending, which last year's failed recovery put on hold.

BRINGING UP THE REAR IN AMERICA'S PAYROLLS

The latest news on jobs for May is not great, but it's certainly good. Nonfarm payrolls rose by 68,000 workers last month, and the government revised the gain to 182,000—56,000 more than first reported. Payrolls have now grown for four consecutive months. That hasn't happened in more than two years. The new data also incorporated Labor's annual benchmark revisions. The numbers were in line with the government's preliminary results, disclosed several months ago. The revised data showed that job losses from June, 1990, to January 1992, were 529,000 greater than the old data indicated. That brought the total loss to 2.2 million, putting it behind the 2.3 million jobs lost in the 1973-75 recession and the 2.8 million decline during the 1981-82 downturn—the two most severe postwar slumps.

Two new points did emerge, however. First, all of the downward revision occurred in service-producing industries. Labor says it had generally overestimated the growth of service-sector output and employment during the past two years. The implication is that cost-cutting and restructuring among service companies is taking a much greater toll on jobs than originally thought.

Also, revisions show that payrolls hit bottom in January, 1992, not in April, 1991. That's a strong argument that the economy was in one long dip from the beginning of the recession in July, 1990, and that the downturn may yet go on record as the longest in the postwar era.

A LOWER JOBLESS RATE WILL TAKE TIME

But that's history. In the coming months, companies will continue to add to their payrolls. Getting the unemployment rate down will take time, however. Job growth—particularly in services—will continue to lag behind the normal recovery pace. Since January, nonfarm industries have added an average of nearly 90,000 jobs per month. That's far behind the usual early-recovery pace of 250,000 to 300,000 per month.

That sluggish pace was a key factor in the May jump in the unemployment rate, from 7.2% to 7.5%—an eight-year high. Joblessness usually keeps rising as a recovery begins, because workers reenter the labor force faster than jobs become available. Through May, the labor force grew at the fastest five-month pace in eight years.

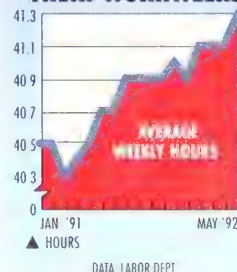
Manufacturing stands poised to absorb some of those job seekers. Although factory employment continued to drift downward in May, dipping by 10,000 jobs, the workweek lengthened by 12 minutes, to 41.3 hours (chart). That's the highest figure for weekly hours since 1966, and the increase was broad, affecting most industries. The workweek in various service-producing industries also rose.

In addition, factory overtime rose from 3.8 hours to 4 hours. Overtime has exceeded that level only twice in the 36-year history of the data.

The big jump in factory work time means that industrial production posted another healthy gain in May, with further increases on the way. Factory inventories are exceptionally low relative to sales, so stock levels will have to be rebuilt this summer.

Moreover, increased hours suggest that factory pay-

FACTORIES STRETCH THEIR WORKWEEKS



Business Outlook

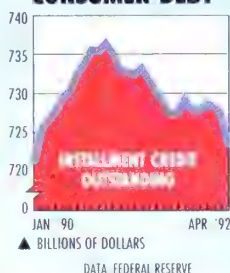
rolls are ready to start expanding again. Manufacturers typically stretch out their workweeks early in a recovery, while they're still judging the upturn's staying power. But with work time already pushed to the limit amid rising orders and lean inventories, factories will have to start hiring again.

Of course, the big payoff for consumers—and the recovery—is that the stronger job market is generating income. That was the missing ingredient that prevented the upturn from getting off the ground last year. Combined with May's gain in nonfarm jobs and a 0.3% rise in hourly pay, to \$10.56, the longer workweek suggests a solid gain in the month's personal income.

SHOPPERS ARE LEERY OF BUYING ON CREDIT

Consumers will need healthy income gains because they are not going to be using so much credit for purchases as in past recoveries. Even as the economy picks up, consumers continue to be wary of taking on more IOUs. Installment debt fell by a steep \$3.8 billion in April, on top of a nearly \$1 billion decline in March. The April drop was the biggest in almost 12 years.

A STEEP FALL IN CONSUMER DEBT



or opting to lease instead of buy new cars. Neither trend is likely to reverse as the economy picks up. That means a continued fall in auto loans.

But even credit cards are losing their popularity. Re-

volving credit increased in April, but by a paltry million. And it had dropped by \$714 million in March. Some of the decline in credit-card use is being taken by home-equity loans. They rose by \$474 million in April. But even home-equity loans are losing their allure. In the past year, they have grown by 10.1%, less than half of the 21.8% growth rate in the 12 months before.

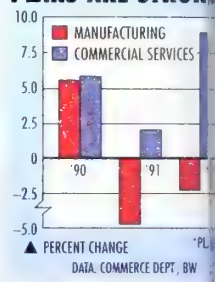
Home-equity financing may pick up again if the rebound in housing continues to strengthen prices. But even so, consumers are not apt to rack up the high debt figures that they did in the 1980s. This aversion to saying "Charge it" means household balance sheets will continue to look better, but less borrowing will hold back spending—especially on big-ticket items.

Still, growth in jobs and incomes should be sufficient to keep stores and factories busy. If so, companies themselves will give the recovery a boost, as they increase outlays for new plants and equipment. The Commerce Dept.'s latest survey of capital-spending plans, taken in April and May, shows that nonfarm businesses expect to raise their outlays this year by 6%, after adjusting for inflation. Spending dropped 1% in 1991.

The projected gains are not uniform, though. Factories plan to cut outlays by 2.4%, while commercial services, including retailing, wholesaling, finance, and communications—expect to boost their spending by a strong 10% (chart). That probably reflects the industry's effort to cut labor costs and increase productivity.

So far, the recovery is proceeding along fairly traditional lines: Consumers are leading the way, and businesses are poised to contribute. Labor markets clearly point to that kind of pattern, but they also suggest that the upturn will be untraditionally modest.

WHERE SPENDING PLANS ARE STRONG



THE WEEK AHEAD

HOUSING STARTS

Tuesday, June 16, 8:30 a.m.

Housing starts probably rose by 4% in May, to an annual rate of just 1.17 million, say economists surveyed by McGraw-Hill Inc.'s MMS International. If so, that would hardly reverse April's 17% plunge in starts. Another weak performance in homebuilding in May would call into question the year-old housing recovery. That's especially true if single-family housing starts, which fell 10.6% in April, do not bounce back in May.

INDUSTRIAL PRODUCTION

Tuesday, June 16, 9:15 a.m.

Output at the nation's factories, utilities, and mines likely increased by 0.4% in

May, following a 0.6% gain in April. That's suggested by the increase in the factory workweek to a lengthy 41.3 hours. Businesses, sensing the need to rebuild inventories, are revving up production. As a result, capacity utilization rates probably rose to 79% in May, up from 78.7% in April, says the MMS report.

PRODUCTIVITY AND COSTS

Wednesday, June 17, 10 a.m.

Output per hour worked in the nonfarm business sector likely grew at a 2% annual rate in the first quarter, after rising 1.9% in the fourth quarter. The increase in productivity means that unit labor costs advanced at an annual rate of about 2% last quarter, up from 0.9% at the end of 1991.

MERCHANDISE TRADE DEFICIT

Thursday, June 18, 8:30 a.m.

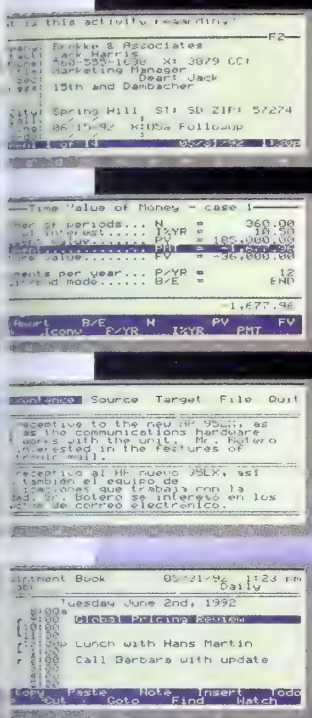
The foreign trade deficit probably narrowed slightly to \$5.5 billion in May, from \$5.8 billion in March, the MMS economists project. Exports, which fell 8% in March, are expected to have increased in April. Imports probably were unchanged, after a 4.5% gain in March.

FEDERAL BUDGET

Friday, June 19

The U.S. government will likely post a \$50 billion deficit in May, a bit better than the \$53.4 billion shortfall of May 1991. Outlays are outpacing tax receipts so far this year, and the fiscal 1992 deficit will likely top \$350 billion.

the HP 95LX palmtop PC.



Don't forget to pack your office.

Just because you're out of the office doesn't mean you have to be away from your critical business information. Now you can transfer your files and take them with you. With the HP 95LX. An MS-DOS[®] based computer that measures just 6.3" x 3.4" x 1" (closed).

The HP 95LX is packed with built-in software. Lotus[®] 1-2-3[®] lets you take your spreadsheets with you. Do "what ifs" and attend meetings with all the latest figures. Phone Book allows you to instantly access names, phone numbers and ad-

resses. Appointment Book lets you monitor your schedule. There's even Memo Editor. And, of course, a powerful HP financial calculator. Dozens of optional applications are also available. For example, SkyStream receives messages wirelessly. Money Manager tracks monthly expenses. ACT! manages client data. Globalink translates languages. And IntelliLink interacts with Microsoft[®] Windows. The HP 95LX applications reside in the 1-Mbyte ROM. There's up to 1-Mbyte RAM for *your* files. And

with the plug-in slot, plenty of software and memory can be added.

Call 800-443-1254, Dept. 29 for details and U.S. retailer locations. In Canada, call 800-387-3867. After all, you're going places.



**HEWLETT
PACKARD**

Microsoft and MS-DOS are U.S. registered trademarks of Microsoft Corporation. Lotus and 1-2-3 are U.S. registered trademarks of Lotus Development Corporation. ACT! is a product of Contact Software International Inc. SkyStream receiver is a product of SkyTel. Money Manager is a product of Autobyte Corporation. Globalink is a product of Globalink Inc. IntelliLink is a product of IntelliLink Inc. © 1992 Hewlett-Packard Company. PG12201A

GM TIGHTENS THE SCREWS

ONLY THE FITTEST OF ITS SUPPLIERS WILL SURVIVE

Former management consultant Elliott B. Ross knew when he bought a small auto parts business three years ago that it would need lots of work. Since then, he has drastically overhauled his Bangor (Mich.) company. But on June 2, General Motors Corp. told Ross and its 5,700 other suppliers that they've got lots more to do. Ross, co-chairman of Inverness Castings Group, a die castings outfit that makes, among other things, window frames for Cadillacs, says he's ready and willing. He adds: "We view this as an opportunity to help improve our organization."

His opportunity comes from GM's plans to winnow its suppliers down to those who can offer the highest quality parts at the cheapest price. To get there, the company even said it will no longer protect its in-house parts-making operations from more efficient outside suppliers (page 127). "Essentially, [GM] said 'Look, all bets are off, and all bids are open,'" says Michael Flynn, assistant director of the University of Michigan's Office for the Study of Transportation.

SHIFTING STRATEGY. GM's plans are wreaking havoc in an industry that has already faced a decade of intense profit pressure. During the 1980s, the parts business slashed some 100,000 jobs. Now, the auto giant's shifting strategy means many of its U.S. suppliers must overhaul their businesses even more radically and remake their finances. Worse, the changes could even cost them the contracts they've already signed with GM.

Revamping the auto parts business is no small job. GM does no less than \$30 billion in business a year with its North American suppliers. LTV Corp. alone sells GM \$475 million worth of steel a year, while TRW Inc. produces \$441 million worth of valves and other parts for GM worldwide. Sales of auto parts in the U.S. amount to more than \$100 billion. Indeed, the industry employs some 600,000 people—excluding steel companies and others not dedicated to the auto business—equivalent to the North

American payroll at Detroit's Big Three.

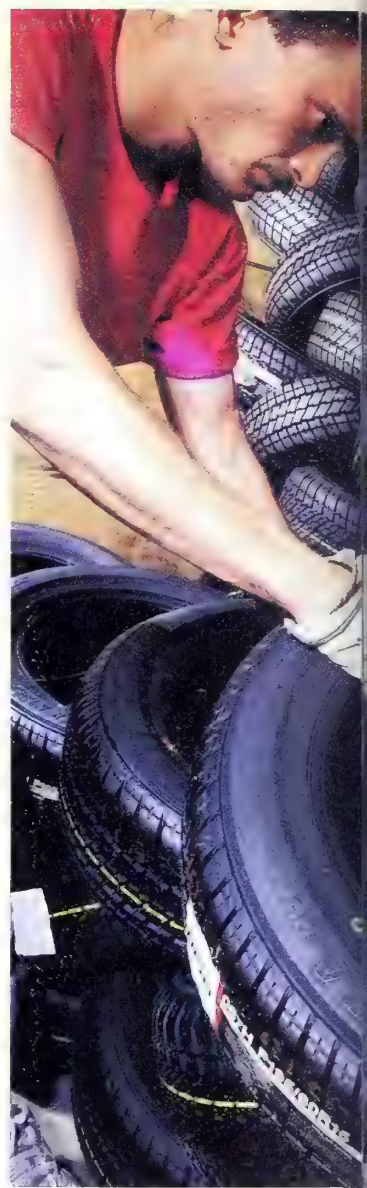
Most of the parts makers concede that there is a need for change at beleaguered GM. But many outside suppliers, from giant tire makers and steel producers to tiny metal-benders, are livid about the coming changes in the policy on buying parts—even if they're reluctant to say so publicly. "It's take, take, take," complains an official at one steel producer. "[GM is] absolutely blackmailing us," a tire executive gripes.

INEVITABLE? Even the enthusiastic Ross admits that GM's new parts program "is going to be terribly painful." Though GM has offered to send its own engineering consultants to auto parts makers who need help boosting productivity, some of the company's planned changes can't be consulted away. Today, for example, GM lays out the front money for the tooling that many suppliers use to make their parts. For Ross, that amounts to a full 7% of sales. Under GM's new plan, Inverness will have to finance those costs alone. "We'll have to totally restructure our balance sheet and our cash flows," Ross says.

This sort of dramatic action from GM was inevitable. The company last year lost some \$7.5 billion in its North American operations, prompting its board of directors in April to name former European chief John F. Smith Jr. as president. In Europe, Smith engineered a major turnaround for the auto maker by cutting costs—in large part by squeezing suppliers for lower prices and better quality.

To do the job in the U.S., Smith brought in J. Ignacio Lopez de Arriortua, 51, who led the charge in Europe to improve suppliers' performance. Lopez, who declined comment for this story, is clearly on a mission to make big changes in the U.S. Says a spokeswoman: He is "looking for every opportunity to reduce our material cost."

As some observers see it, the overhaul will bring GM up to speed with domestic rivals Ford Motor Corp. and Chrysler Corp., which have successfully reduced



comparable costs. And many U.S. suppliers see the moves as a break stodgy tradition and a harbinger of badly needed cultural shift. "This is a refreshing change," says Gerald Jusco, a vice-president at ITT Automotive Inc. Indeed, for top global performers that can offer the auto company increasingly dramatic volume-based cost reductions, the changes could be business boosters. "It is a net opportunity for suppliers who are cost-competitive," says Tenneco Automotive President John P. Reilly.

'UP THE CREEK.' For many others, though, the shift in policy is likely to be harsh. "The small guy is really up the creek," says William F. Rebore, president of body and chassis systems at Rockwell International Corp.'s auto

OUTSIDE

SUPPLIERS MUST CUT PRICES, PAY FOR TOOLING UPFRONT, AND WELCOME GM SHOP ADVISERS

INSIDE

GM'S OWN PARTS MAKERS WILL NOW HAVE TO COMPETE AGAINST OUTSIDERS

HOW VENDORS SEE GM'S NEW RULES

GM'S PLAN COULD HELP U.S. PARTS SUPPLIERS BY LETTING THEM...

- ▶ Supply parts General Motors now makes itself
- ▶ Win more of GM's foreign business
- ▶ Use GM's expertise to lower costs and improve quality and service

...BUT THE NEW RULES COULD ALSO...

- ▶ Lower margins, since GM wants lower prices on existing contracts
- ▶ Squeeze cash flow, because suppliers now must finance tooling—which GM used to bankroll
- ▶ Hamper long-term cooperation between suppliers and GM

DATA BW

ASSEMBLY

THE RESULT: GM EXPECTS ITS NEW APPROACH TO REAP BIG SAVINGS IN PRODUCTION

...tive operation. And com-
... that have already cut costs to
... modate GM are outraged at what
... ee as a breach of faith by the auto
... GM is midway through a three-
... act with many suppliers that calls
... cessive price reductions of 3%,
... d 2%. That, some suppliers say, is
... e window now, though it's unlikely
... ually will rewrite major orders for
... since it would have to test parts
... new suppliers at a moment when
... bly is just around the corner. Still,
... makers say, they are being asked
... id on contracts they've already
... or the 1993 model year. "With
... u have to wonder when a contract
... ntract," says Tenneco's Reilly.
... he tire industry, GM's request for
... ids could hurt producers just as

they are beginning to step from a bath of red ink. Tire executives say the auto maker's hard line could force further price cuts in the U.S. Steelmakers, too, are incensed by GM's threatened demands for lower prices. Many say they're galled by the hat-in-hand routine. One recent study by Putnam-Hayes, Bartlett Inc., a management consulting firm in Cambridge, Mass., shows that carbon steel prices actually declined 6% from 1981 to 1991, while car prices rose 29%. Most steelmakers, meanwhile, lost money last year and will again in 1992. **'SHARE THE PAIN.'** There is a serious long-term risk for GM, suppliers say. If the auto maker returns to buying largely on the basis of price, it will destroy the potential for long-term partnership with its vendors. "If GM just screws peo-

ple, they'll sabotage the system," says James P. Womack, former research director of the International Motor Vehicle Program at Massachusetts Institute of Technology. "If they share the pain, both sides will win in the end."

Increasingly, GM's rivals from Europe to Detroit to Japan are trying to compete globally by viewing their suppliers as partners who must be consulted about changes in design and production. GM's June 2 announcement has some wondering whether the auto maker isn't trying to turn the clock back to the days when it could dictate what it wanted, and what it wanted to pay.

By Zachary Schiller in Cleveland, with David Woodruff in Detroit, Kevin Kelly in Chicago, and Michael Schroeder in Pittsburgh

THE DIET BUSINESS STARTS SWEATING

New federal rules on weight-loss claims could hurt a rebound

The never-ending battle between Americans and their waistlines is about to heat up. Just as bathing-suit season moves into full swing, the diet business is girding itself for a new showdown with Washington.

In May, the Federal Trade Commission completed investigations into misleading advertising among more than a dozen diet chains. By fall, the agency plans to force big changes in the companies' advertising practices. Before-and-

phetamine-like stimulant that's the active ingredient in such widely used appetite suppressants as Acutrim and Dexatrim.

The agency crackdown makes a triple threat for the diet biz. In an April report from the National Institutes of Health, the Feds reported that, within a year, virtually all dieters regain two-thirds of their weight. Within five years, they regain it all.

Despite all of these new hurdles, the

worst of all—and certainly the hardest to hide—Oprah regained her weight.

The recession didn't help, either. America's economic downturn inspired belt-tightening that didn't include dieting. Suddenly, people such as Gretchen Gray, a Weight Watchers International vet, dropped out, citing the financial burden of dieting. By the end of the year, the fat-and-happy \$4 billion diet clinic business had shrunk by more than 15%. "This industry changed dramatically, with the recession and with the bad publicity of lawsuits and the Congressional hearings," says Charles M. Berger, Weight Watchers chairman.

PITFALLS. Although diet executives say the impact won't be severe, Washington's coming regulations could dampen the industry's rebound. At Weight Watchers, a unit of H. J. Heinz Co.,

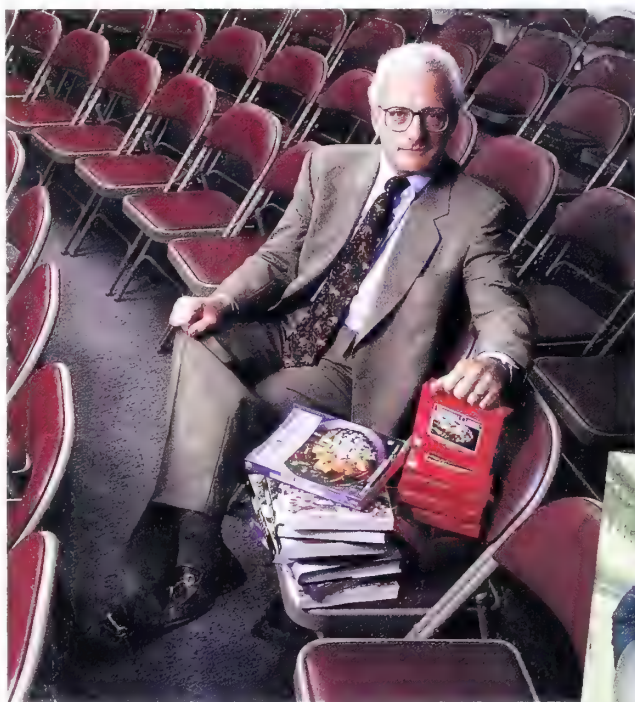
revenues in fiscal 1991, including grocery store food sales, grew more than 10% to \$1.6 billion, worldwide. At Jenny Craig, the diet industry's No. 3 company, sales grew 15% to \$346 million, for the nine months through March.

The diet companies are counting on revamped strategies to blunt the effect of new regulations. Weight Watchers is moving its meetings out of church basements and school halls to highly visible, flashy storefront locations. And it's stocking them with new line of prepared foods that its pressed customers can buy.

Jenny Craig allows clients to eat its Jenny's Cuisine five days a week, easing the weekly food bill that used to be \$70. It's showing up

at supermarkets, jointly promoting a line of low-cal cheese slices with Borden's, for example. And it's testing a program to supply its food and services to rehabilitation companies. Its goal: to get more programs covered by insurance.

Most of all, the industry can't count on this paradox: The yearning to lose weight hasn't faded, no matter how many times dieters are told that their effort is largely fruitless. Take Pe-



WEIGHT WATCHERS' BERGER: DESPITE DROP-OUTS LIKE GRAY, REVENUES GREW TO \$1.6 BILLION IN FISCAL '92

SLIMMER GROWTH FOR THE DIET BIZ

	Revenues Billions of dollars		
	1989	1990	1991
COMMERCIAL DIET CENTERS	\$2.3	\$2.0	\$2.2
HOSPITAL-BASED PROGRAMS	2.0	1.6	1.6
LOW-CALORIE FOODS	1.7	2.0	2.2
DIET PILLS AND LIQUIDS	0.5	1.5	1.7
DIET BOOKS	0.6	0.7	0.7

DATA: MARKETDATA ENTERPRISES INC.



after testimonials will have to show typical clients, not just the most successful ones. And claims that customers keep the weight off will have to be substantiated. "It's about time we lay out a set of rules," says Representative Ron Wyden (D-Ore.), whose subcommittee hearings paved the way for the FTC.

TRIPLE THREAT. The Food & Drug Administration is set to jump into the fray, too. The agency, which has delayed approval of new drug treatments for obesity (box), will decide by the end of the year whether diet products can include PPA, or phenylpropanolamine, the am-

phetamine-like stimulant that's the active ingredient in such widely used appetite suppressants as Acutrim and Dexatrim. The agency crackdown makes a triple threat for the diet biz. In an April report from the National Institutes of Health, the Feds reported that, within a year, virtually all dieters regain two-thirds of their weight. Within five years, they regain it all. Despite all of these new hurdles, the industry is recovering. During the 1980s, diet clinics seemed to pop up in nearly every shopping mall. And who could miss talk-show host Oprah Winfrey, who dropped 67 pounds on a liquid diet? But then, two of the biggest chains, Nutri/System Inc. and Jenny Craig Inc., were hit in 1990 by a rash of lawsuits alleging that their programs caused gall bladder disease. Congress held closely watched hearings investigating the safety and efficacy of weight-loss regimes. Perhaps

wn. The Metuchen (N.J.) real estate it lost 45 pounds on Nutri/System's gram, and suffered stomach pains all while. After gaining it back, she ed to Jenny Craig and failed. This th, she signed up for Weight Watch- "It's a lifetime fight," she says. it's what keeps them in business." me 50 million Americans begin diets y year. "When I started working in

this field 22 years ago, eating problems affected a limited group, women in their 30s and 40s," says Susie Orbach, whose book *Fat is a Feminist Issue* sparked a brief backlash in 1978. "Now, we know from studies that girls of 9 and women of 60 are all obsessed with the way they look."

So the industry grows. Sales of products and services for serious dieters

grew 8% last year, to \$8.4 billion (table). But when health club fees, artificial sweeteners, and diet soft drinks are tallied in, Americans spent closer to \$33 billion. Dieting may be a cyclical business. But, to the vast relief of the diet biz, it's an American obsession.

By Larry Armstrong in Los Angeles, with Maria Mallory in Pittsburgh and bureau reports

PROZAC IS MAKING LILLY A LITTLE EDGY

Patricia Padgett Lea was a true believer. A drug analyst with Vector Securities International, Lea has long promoted Eli Lilly & Co.'s stock based on the weight-loss potential of Prozac, the company's controversial antidepressant. Lea estimated that if the Food & Drug Administration approved Lilly's petition to market Prozac as an obesity treatment, the drug would add more than \$1 billion to Lilly's sales by the mid-1990s. Lea was so confident of Prozac's ability to help patients shed pounds that in 1989, she asked her doctor to prescribe the drug for her as a diet aid. Prozac did help Lea lose a lot of pounds. Yet just a week after starting the treatment, she stopped taking the drug, saying it brought on anxiety attacks. That's not why Lea quit recommending Lilly's stock last month. Rather, she became convinced that the drug, which has been reviewed

slowly: Sales of Prozac in the U.S. have run flat for six straight quarters.

That's mostly because of lingering concerns over Prozac's side effects, including widely publicized charges that it causes some users to kill themselves and others. Although an FDA advisory panel found "no credible evidence" that Prozac has such side effects, the decision had little impact on sales.

spokesman. Still, Lilly's stock has plunged 22% this year, and has recently traded around 65.

Lilly has other problems. The company's No. 1 drug, the antibiotic Ceclor, will lose its U.S. patent protection in December. Worse still, Prozac now faces tough new competition from Pfizer Inc.'s Zoloft antidepressant, which was launched in February.

Priced as much as 7% lower than Prozac—and free of bad publicity—Zoloft has already won some 4% of the antidepressant market.

PROMISES. Longtime skeptics of drug treatment for obesity aren't surprised by the Prozac study's findings. "The use of Prozac for weight loss is selling false hope to consumers and preying upon their desperation to lose weight," says David M. Garner of Michigan State University's Eating Disorders Program.

But off-label use of Prozac as a diet drug is widespread, Garner and others say. The practice is legal. But it is also worrisome, because the drug is most effective for obesity at 60 milligrams—triple the typical effective dosage for depression. Like many drugs, Prozac's side effects, including insomnia and stomach upset, are dose-related.

Even doctors who prescribe Prozac for obese patients harbor doubts. Dr. Arthur Frank, of the George Washington University Obesity Management Program, says that he gives Prozac to about 5% of his weight-loss patients. But he adds that to dieters, Prozac "promises more than it delivers." With that kind of endorsement, its potential as a weight-loss blockbuster looks slim.

By Julia Flynn in Chicago

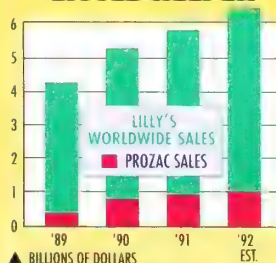
ANALYST LEA:
PROZAC WON'T FLY
AS A DIET AID



Lilly had hoped that by marketing Prozac as a weight-loss drug under the Lovan brand name, Prozac might shed its troubled past. Analysts figured Lovan sales could lift Lilly's 1992 growth rate by as much as 8%, to 20%. The projections lifted Lilly's stock above 87 in early 1992, up 14% in six months. "Lovan would have been Lilly's booster rocket," says Christina Heuer, a Smith Barney, Harris Upham & Co. analyst.

Now, doubts about Lovan's long-term efficacy may have scotched Lilly's plans for good, though Lilly downplays the findings. "It's a well-known fact that about 90% of all dieters using any method are going to regain the weight they lose," says a company

LILLY'S LITTLE HELPER



Prozac since early 1988, was never going to approve it for weight loss. "I was one of the early believers in Prozac's obesity potential," says Lea. "Now, I don't think it's going to get approved any time soon." Very likely, she's right. New data from a 30-week, Lilly-funded clinical trial suggest that Prozac is something more than a miracle tonic for weight loss. The study, published in the current issue of the *International Journal of Obesity*, shows that patients treated with Prozac for more than 16 weeks begin to regain the weight they lost, possibly because they build tolerance to the drug.

BOOSTER ROCKET. The study is bad news for Prozac's chances of approval and worse news for Lilly. As the drug's best-selling antidepressant, Prozac will generate 25% of Lilly's estimated \$1.48 billion in net earnings this year and 15% of its \$6.36 billion in 1992. Yet the drug's sales growth is

Commentary/by Paul Magnusson

A CHIP WAR WITH JAPAN? NO. BUT MAYBE A SKIRMISH

As a negotiator with America's trading partners, Carla A. Hills can be tough and wily. But she probably ought to stay out of the boxing ring. Hills, the U.S. Trade Representative, always prefers talking to hitting back. "When you retaliate," she explains, "you've failed."

But there is such a thing as being too patient. Consider Japan's decade-long stream of unfulfilled promises to open its market to foreign-made semiconductors. Not only has the Bush Administration been willing to put up with more pledges than action, but last year it actually removed \$300 million in retaliatory tariffs that President Reagan had slapped on Tokyo for welshing on previous market-opening deals.

NO DOUBTS. Now, Hills, who describes herself as "extremely troubled" and "greatly concerned" about semiconductor trade with Japan, has announced—what else?—a new "interagency review" of whether the Japanese have failed to live up to the latest agreement, signed just 12 months ago. The results of the investigation, which the American chip industry hailed, are due Aug. 1. But there can be no doubt about its finding. Despite Tokyo's signed assurances in 1986 and 1991 that foreigners could have 20% of the Japanese market, annual sales haven't topped 13% (chart). Given that track record, why put much stock in Japan's June 4 vow to try harder to reach the 20% target?

At stake is the world's largest semiconductor market and an additional \$1 billion in annual sales for U.S. chipmakers. American chip companies "have to penetrate the Japanese market if they're going to succeed worldwide," says Gene Norrett, vice-president of researcher Dataquest Inc.

But cracking Japan won't happen without White House help. Evidence that Japan remains largely closed to U.S. chips is overwhelming. U.S. chips supply some 45% of European demand. In America, U.S. chips outsell Japan's 70% to 20%. And in Japan's backyard,

the Asia-Pacific region, U.S. products enjoy a 43%-to-34% edge.

Why is the Japanese home market so different? Mostly politics. In the 1970s and early 1980s, Japan's Ministry of International Trade & Industry threw up barriers to chip imports and required U.S. investors to share technology with Japanese partners. At the same time, MITI put big money behind an expansion by Japan's giant electronics companies into chipmaking.



The Reagan Administration pressured MITI to ease up, and in 1982 and 1983 agreements, Tokyo promised to let in more U.S. chips. But nothing happened. In a more comprehensive agreement in 1986, Tokyo signed a secret side letter setting a 20% market share by 1991 as a reasonable barometer of success.

But little more than excuses have followed. In 1987, the Reagan Administration imposed 100% tariffs on Japanese power tools and some laptop computers, in an attempt to push Japan to allow sales to build to the 20% target. Under the pressure, MITI at first disputed the existence of the side letter. Last summer, with the backing of the U.S. Semiconductor Industry Assn. (SIA), Washington and Tokyo struck another deal. Japan was given until the end of 1992 to

reach the 20% goal. In return for agreeing publicly to the target, \$300 million in tool and computer tariffs were dropped.

Now, the two sides are headed for showdown. "There isn't a snowball's chance in hell the Japanese will meet the 20% figure by the end of the year," predicts Kenneth Flamm, a chip-industry analyst at the Brookings Institution. A spokesman for the Electronic Industry Association of Japan (EIAJ)

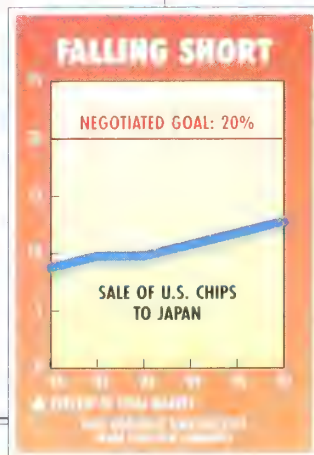
agrees. But he points out that increasing Japanese demand for custom-made U.S. chips. If only American firms would open more design centers in Japan, they would be better, the Japanese industry group says.

SERIOUS LIST. Nonsense, the SIA replies. Since 1986, U.S. firms have opened sales offices, design centers, and fabricating plants at the rate of one a month. American companies now count for a quarter of design centers in Japan. But SIA figures show that U.S. labs in Japan

already are showing diminishing returns. Indeed, as the use of custom chips has grown, sales per design have fallen. Meanwhile, with the Japanese consumer-electronics industry in a sales slump, Japanese electronics firms have been producing more of their chips in-house. The result: Demand for U.S. chips remains stagnant at best.

So far, Washington's efforts to retaliate have been halfhearted and short-lived. Now is the time to start

drawing up a more serious list: Punitive tariffs on fancy, chip-filled camcorders, stereos, and digital audio tape players are one possibility. Placing similar duties on cellular telephones and printers is another. One of the latest investigations verifies what everybody already knows, Hills should finally be ready to stop talking and start hitting back.



AILING THE OUTHAMPTON SEVEN

SEC widens its insider-trading net—but faces a battle royal



MANSION ON OX PASTURE ROAD: SITE OF
SEC, POKER—AND ILLEGAL STOCK TIPS?

When prosecutors filed insider-trading charges against a group of prominent New York elites on June 4, the news shocked Long Island enclave of Southampton. There, the government contends, in mansion on Ox Pasture Road, Edward Downe Jr. swapped inside corporate information with at least six friends. Big parties, over poker, and on long excursions in the late 1980s, he allegedly provided this inner circle with stock tips that enabled them to reap more than \$23 million in profits. Downe has pleaded guilty to criminal charges, while retired Chairman Fred R. Sullivan settled charges of giving Downe a takeover. Sullivan agreed to pay \$58,000 in fines.

Some legal experts predict the government could have a hard time nailing other members of the Southampton Seven, all of whom deny wrongdoing. The reasons: murky insider trading and the courts' penchant for rejecting the government's notion of who can be swept into its insider-trading dragnet. Lawyers for the defendants are gearing up for a battle royal, denouncing the Securities & Exchange Commission for overreaching. The government "is ready to prosecute all things insider trading which," says Harvey L. Pitt, attorney



DOWNE AND GREENBERG: THE SEC SAYS THEY AND
OTHERS MADE \$23 MILLION ON INSIDE INFORMATION

for one of the accused traders, public relations maverick Steven A. Greenberg.

In settling the criminal charges, Downe didn't plead guilty to insider trading. Instead, the former magazine publisher admitted to violating a technical SEC rule requiring officers and directors to report whenever they buy or sell stock in companies they serve. Critics say the plea deal transforms a common infraction among executives, and rarely punished, into a crime that carries a penalty of up to five years in prison. "This removes any burden the SEC has to prove insider trading and increases its leverage," says Columbia Law School Professor John Coffee. "It would be like the IRS bringing criminal prosecutions for anyone filing their income taxes two days late."

It's not surprising that the government is trying such hardball tactics. Despite the SEC's success at winning sanctions against prominent Wall Street

figures during the 1980s, prosecutors recently have suffered setbacks in court. Some legal experts believe those decisions could hurt the government's ability to expand its investigation beyond Southampton's insiders to others who allegedly received tips.

A case decided last October that partially overturned an insider-trading conviction of stockbroker Robert Chestman could prove particularly nettlesome for the SEC now. In that case, the U.S. Court of Appeals in New York ruled that the government hadn't proved that Chestman knew the tip he received from the son-in-law of an executive was confidential inside information.

HASTY CASE? The SEC now will have to prove that the Southampton Seven, whose members also include Revlon Inc. co-founder Martin Revson, knew that any tips they received from Downe were based on privileged information he gained as a director of Bear Stearns Cos. and Kidde. "There's no question the Chestman decision gives the SEC problems" with recipients of third-hand tips, says former SEC enforcement official Wallace L. Timmeny.

But SEC enforcement director William McLucas doesn't believe the Chestman ruling will cause problems because the facts in that case were unique. The Southampton case, he insists, "involves insiders...and tippees who knew the tips were illegal."

Just in case, prosecutors may have a strategy for getting around that October decision. The government allowed Downe to plead guilty to a charge that doesn't involve fraud—and thus can't be used by investors to sue him for damages. In return, Downe may be expected to testify

against his friends. But even if he says they knew the information was confidential, that may not be good enough. Defense lawyers will try to discredit Downe as a convict who is trying to reduce his sentence.

The defendants also claim that SEC enforcement officials, who have been investigating the case for four years, misread events as they hastily filed the charges to beat the statute of limitations deadline. That some of the accused were buying Kidde stock while others were selling suggests there was little coordination among the alleged traders, say defense attorneys.

Defense lawyers customarily deny that their clients did anything wrong, of course, and often proceed to settle. That could happen here. But for now, it appears that lawyers for the Southampton Seven plan to put the SEC and its insider-trading theories on trial.

By Dean Foust in Washington

GENERAL DYNAMICS TAKES A TOMAHAWK TO ITSELF

Booty from giant asset sales is being passed along to shareholders

Positively dismal. Gruesome. A monumental bummer. These are just a few ways to describe the future of the U.S. defense industry, now that the Soviet Union is out of the superpower racket. Why, then, has the stock of winded weapons-maker General Dynamics Corp. nearly tripled in the past 18 months? Try moolah, moolah, and more moolah.

GD nowadays is glowing with the aura of money—and not because of its

lowed GD to post a \$305 million profit in 1991, after a \$578 million loss the year before, and build up \$1.2 billion in cash and marketable securities. Anders has already boosted the dividend, and on June 8 the former test pilot signaled how he'll spend the rest: Up to \$975 million will be used to buy back 30% of GD shares.

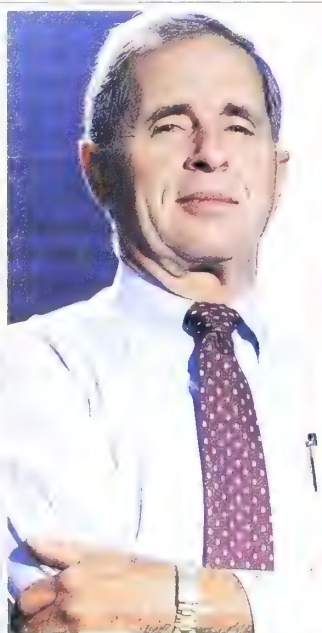
News of the buyback—a so-called Dutch auction in which investors can tender their shares to the company at a

subs, armored vehicles, and space launch systems. "Each has a strong franchise in the marketplace," said Anders.

Yet some of Anders' decisions seem to belie his words. During 1991, capital expenditures were slashed 73%, to \$82 million. Company-sponsored research and development was gutted by half. Few may fault Anders for trimming investment, given the gloomy defense outlook. "Look, this is a company operating in a dying industry," says Morgan Stanley Co. analyst Philip Friedman.

DOWNWARD DRIFT. Since GD has ruled out any diversification moves into non-defense businesses, Friedman and other GD watchers don't forecast much growth. Prudential Securities Inc. analyst Paul H. Nisbet sees GD's operating earnings drifting to about \$250 million by 1995, down from \$305 million in 1991. Likewise, revenues will slide, to about \$1 billion.

It's not hard to see why. The Pentagon is trying to mothball GD's F-16, the heart of its fighter-jet business. Although GD will help in developing the Air Force F-22 next-generation fighter, that won't offset the F-16 slowdown or the cancellation of the Navy's 12 plane back in 1991. GD's other businesses don't seem to be faring much better. The Bush Administration's campaign to cancel the Seawolf nuclear submarine program, threatening GI Electric Boat Div. The Pentagon is also interested in ma-



CEO ANDERS DENIES THAT THE COMPANY IS WINDING DOWN

GD'S SHRINKING ACT

NOVEMBER, 1991

Sells information technology unit and hires Computer Sciences for data systems work. *Proceeds: \$184 million*

JANUARY, 1992

Unveils plans to sell its Cessna commercial-aircraft business to Textron. *Proceeds: \$600 million*

MAY, 1992

Announces plans to sell commercial aircraft components, material service, electronics, ship management, and finance units. *Expected proceeds: \$500 million.* That same month, also agrees to sell off its missile-systems business, which includes production of the Tomahawk cruise and Stinger anti-aircraft weapons, to General Motors' Hughes Aircraft. *Expected proceeds: \$450 million*

DATA: B.W. MORGAN STANLEY & CO. ESTIMATES



LESTER CROWN'S FAMILY STANDS TO POCKET \$370 MILLION

growth prospects. Rather, Chief Executive William A. Anders has been selling off chunks of the \$8.7 billion defense colossus and passing the booty along to shareholders. And the great sell-off may be just beginning. Indeed, it may not end until GD becomes a shadow of its former self—or merges with a rival. "They've basically said there's no point investing in defense any more," says Soraya Betteron, a portfolio manager at San Francisco's GT Capital Management, a GD shareholder.

Since taking over at troubled GD in January, 1990, Anders has put \$1.7 billion worth of assets (table) on the block. Roughly a quarter of the work force, 24,800 souls in all, has vanished, too. Although painful, Anders' crash diet al-

price between \$65 and \$75—sent GD's stock soaring five points, to 71. That's good news for shareholders, whether they take the deal or not. Chicago's Crown family, which has long held a big stake in GD, could walk away with about \$370 million if members go ahead with plans to reduce their stake to 15% from 22%. Lester Crown and two other family representatives will remain on the board.

Anders insists he's not liquidating the once proud titan, whose Abrams tanks, Tomahawk cruise missiles, and Trident submarines were mainstays of America's arsenal against the Soviet threat. At GD's annual meeting in May, Anders sketched a vision of a prospering post-cold-war company, focused on four core businesses: tactical aircraft, nuclear

tanks these days, and GD's space-systems business is losing money to stiff foreign competition.

For now, Anders can count on a steady stream of cash. GD's deal to sell its missile-systems business to General Motors Corp.'s Hughes Aircraft Co. will bring in at least \$450 million later this year. Other businesses up for sale may fetch \$500 million more. And Morgan Stanley's Friedman says stockholders may see a special payout soon.

But since GD is stripping down instead of diversifying, the defense downturn bound to catch up to it. When that happens, investors transfixed by GD's money aura may rub their eyes and find they've seen a corporate shrinking act.

By Brian Bremner in Washington



**This year,
83,329 pieces of paper
will cross the average
executive's desk.**

**Fortunately, this is
no average desk.**



It's a Mueller® Provincia desk by Haworth. And uncovering its rich wood finish is a gratifying reward for reaching the bottom of a long day's paperwork. ▼ Still, Haworth desks are better known as a reward for reaching the top. In fact, they've been a symbol of success for over 40 years. ▼ Isn't it time you and Haworth crossed career paths? For more information about our company and our complete line of office furniture, call Laura Cramer at 1-800-344-2600.

HAWORTH WORKS FOR BUSINESS.

HAWORTH®

CAN THIS PREDATOR CHANGE ITS STRIPES?

Hanson says it will focus on core businesses and 'friendly deals'

Plenty of dealmakers have come and gone, done in by hubris, debt, the recession—or all three. Then there's the founding duo of Anglo-American conglomerate Hanson PLC. Two of the most feared predators in the takeover game, Lord James Hanson and Lord Gordon White have succeeded by sticking to a formula: Buy cheap, sell unwanted assets high, and manage the rest for cash. Over nearly 30 years, Hanson and White have strung together an empire with \$17 billion in sales, spanning industries from mining to toymaking.

Hanson's latest stirrings look like moves in the same old game. The company may package for sale many of its consumer-related companies in the U.S., which include Tommy Armour golf clubs, Valley pool tables, several home-building units, and possibly Jacuzzi, maker of the famous whirlpool baths. At the same time, Hanson is eyeing Canary Wharf, Olympia & York Developments Ltd.'s sprawling East London office project, now in the hands of court-appointed administrators.

'OUR STAMP.' But rather than the trademark Hanson asset-shuffling, these moves mask a clear change in strategy. The leadership mantle is passing from Lords Hanson, 70, and White, 69, to a younger generation led by Derek C. Bonham, recently appointed chief executive of Hanson, and David H. Clarke, president of the U.S. arm. Although they're Hanson veterans, Bonham, 48, and Clarke, 50, are talking a new line: long-term investment in key businesses, not random addition and subtraction. By unloading the U.S. units, which contribute a relatively small share of stateside profits, they want to focus Hanson on such core businesses as chemicals and coal-mining. "We want to put our own stamp on the company," says Bonham.

Bonham and Clarke also intend to change the way Hanson stalks acquisitions: no more hostile moves. Fearful of regulatory unknowns that could surprise an unwelcome bidder, especially in the U.S., "we are increasingly looking to do friendly deals," insists Bonham. He says the company is equipped to handle an acquisition worth up to \$7 billion.

Ironically, these tactical changes can be traced back a year, when Hanson made its most controversial foray. In what was largely perceived as a hostile bid, the company acquired a 2.8% stake in Britain's blue-chip Imperial Chemical Industries PLC. The overtures were fiercely rebuffed, and ICI raised questions about Hanson's management style that damaged its credibility. Hanson sold its ICI stake in May for a profit of about \$70 million. But the taint lingers. Hanson stock is trading around 4 in London and has underperformed the general

market by 4% over the past year.

An older but equally nasty memory is Hanson's 1989 public offering of shares of office-equipment maker Smith Corona Corp., in which the conglomerate now retains a 48% stake. Within two weeks, Smith Corona announced profit uncertainty and layoffs, sending the share price from its \$21-a-share offering price to a low of \$5. A shareholder class action was eventually settled for \$24 million, and Smith Corona's stock is now trading at 9. The incident, one Hanson director admits, is still "fresh in everyone's mind."

'A MISHMASH.' It's too soon to tell whether a restructuring will boost investor confidence. Some analysts say a prospective sale of U.S. assets could raise up to \$800 million over the next year and offset a downturn in Hanson's recession-battered basic industries. U.S. tax earnings are expected to be down 15%, to \$1.9 billion, for the year ending Sept. 30—the first drop in history—sales of about \$17 billion.

Bonham admits that Hanson has become "too much of a mishmash." He hopes to correct that by expanding sales of the big buys made since 1985, including Peabody Coal, Gold Fields mining, and SCM Organics Chemicals. The move over will leave Hanson's fortunes largely tied to cyclical swings in the economy, a strategy many analysts applaud. Company executives have some cajoling to do. "They've got a big task to convince investors that this really is the new strategy," says Bruce Davidson, an analyst at Smith Barney Court PLC.

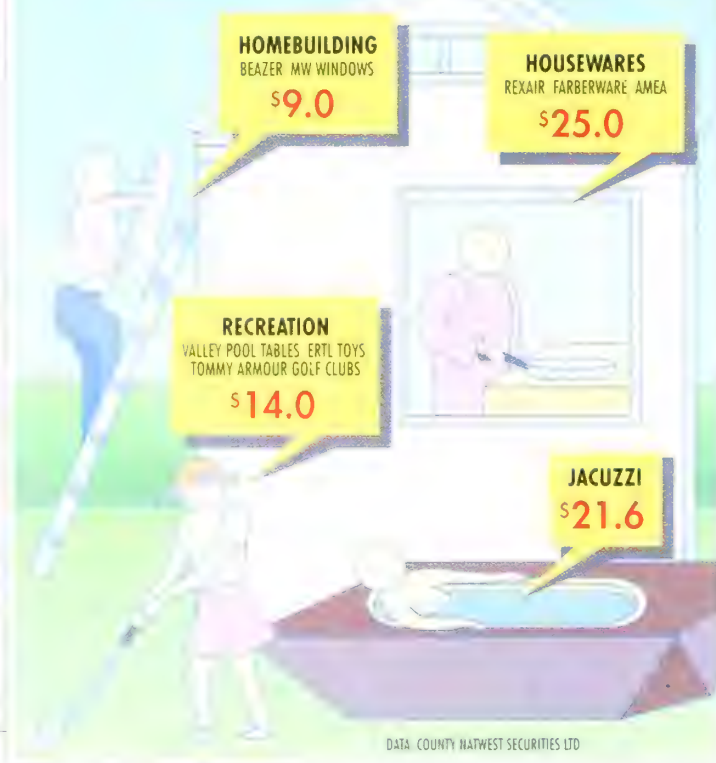
When Hanson does move for new operations, Bonham vows: "We're not going to do anything lunatic. That rules out any interest in British Petroleum, which market players have recently viewed as a high target. And Canary Wharf remains a long shot."

Hanson and White are retiring tomorrow. But only June brought an end to their era. The company cut its ties to the English Derby—a passion of Lord White's—by selling to Ralston Purina Co. Eveready battery unit, longtime race sponsor may be the only Hanson tradition anyone misses.

By Richard A. Melcher
London

HOW HANSON'S U.S. OPERATIONS ARE FARING

ESTIMATED 1992 PROFITS IN MILLIONS OF DOLLARS



DATA: COUNTY HATWEST SECURITIES LTD

All this talk about stability. No wonder you're so nervous.

Relax. Since 1924, our approach to retirement programs has been built upon the single-minded pursuit of quality.

Our unchanging philosophy of pursuing prudent risks plus our strict investment guidelines enable our clients to prosper, whether the market rumbles or roars.

They are also why our Connecticut General Life Insurance Company has consistently earned among the highest ratings from Moody's, Standard & Poor's and A.M. Best.

To us, however, quality means more than having excellent financial ratings.

It means superior fixed income results, with guarantees backed by capital and surplus in excess of \$1 billion. An amount that puts us in the top 1% of all U.S. life

insurers. It means providing everything you need to run a 401(k) or pension plan. From plan design to ongoing management. All of which allows us to achieve a 93% client and asset retention rate year after year.

For further information, write Byron Oliver, President, CIGNA Group Pension, Dept. M-121, P.O. Box 2975, Hartford, CT 06104.

And we will make sure that you never get bent out of shape.



We get paid for results.® **CIGNA**

LEGAL AFFAIRS

KODAK TAKES A SHOT IN THE MUG

It faces trial for trying to corner the service market for its copiers

Consider it a big victory for the little guys. On June 8, the U.S. Supreme Court ruled that Eastman Kodak Co. must stand trial on allegations that it tried to monopolize the market for servicing its photocopying and micrographics equipment—and hoped to drive smaller service competitors out of business.

The decision, which permits a suit by a group of independent servicers to go forward, was a surprising slap by a conservative court at the University of Chicago school of economic theory, beloved of the Reagan and Bush Administrations. It also ensures competition in the \$100 billion aftermarket in service and replacement parts for everything from autos to computers. And that could threaten manufacturers' growing reliance on income from this market. "It will govern the conduct in aftermarkets for the foreseeable future," says Rodger D. Young, a Southfield (Mich.) lawyer who represents small service companies.

The dispute dates to 1985, when Kodak began limiting the availability of parts for its high-volume copiers and micrographics machines. The Rochester (N.Y.) giant allegedly told customers they could get replacement parts only if they agreed not to use outside service companies. "Kodak has hurt this company a lot," says Paul Hernandez, president of Sacramento-based Image Technical Service, one of the companies that sued Kodak.

HANDCUFFED BUYERS? Although the outcome of the case depends on a trial, the 6-3 decision cast doubt on the economic theories espoused by Republican officials and adopted by Kodak in its legal briefs. Kodak and its industry supporters argued that because there was vigorous competition in the sale of the equipment itself, the company couldn't exert monopolistic power over the market for service and parts of that equipment. In an "efficient" market, Kodak said, buyers would stop purchasing equipment from companies that priced too high.

Justice Harry A. Blackmun found otherwise. His majority opinion noted that while the efficient-market theory may hold true in a perfect world, in reality customers often couldn't afford the high cost of switching vendors to save a few



IMAGE'S HERNANDEZ: "KODAK HAS HURT THIS COMPANY"

bucks on service. He also said Image Tech had provided enough evidence of a separate aftermarket in Kodak service and raised serious questions about whether Kodak had tried to thwart competition in that market.

The ruling could revive pending cases against other electronic-equipment makers, ignite new ones, and hearten efforts by independent auto-parts makers to broaden the availability of generic replacement parts for cars damaged in accidents. Kodak's defeat brought sighs of relief from the insurance industry, which feared that a Kodak victory would empower auto makers to reclaim their share of the \$9 billion aftermarket for auto parts.

The decision also imperils increasing reliance by big manufacturers on revenues for service and repair. As sales of big-ticket capital goods slowed in the sluggish economy, computer makers and others have come to rely on service for cash flow and a bulwark against declining profits from equipment sales. Wang Laboratories Inc., for example, garnered 42% of its billion in 1991 sales from service. Other big computer makers typically achieve gross profit margins of 40% to 50% servicing. Now they fear they may have to turn to closely guarded, proprietary

agnostic software and training material to independent competitors. "The real issue is that maintenance is a big business for these vendors," says Rebecca Segal, industry analyst at International Industry Corp. in Framingham, Mass.

The possibility of collecting triple damages in antitrust suits is likely to mean a lot of lawsuits. But after the dust settles, the high court's ruling will set the stage for a new relationship between manufacturers and third-party service companies. And for consumers—really little guys—the decision is likely to result in lower prices for service.

By Tim Smart in Washington, with G. McWilliams in Boston and Alice Z. Chen in San Francisco

TELECOMMUNICATIONS

MCI AFTER McGOWAN: STILL A LONG-DISTANCE RUNNER

It won't spread into other fields, just seek a bigger share of the market

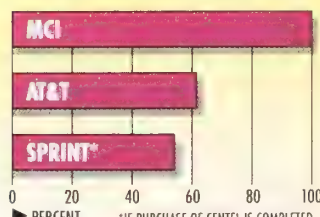
A month before his fatal heart attack on June 8, MCI Communications Corp. Chairman William G. McGowan was waxing philosophical. At a dinner in his Georgetown home with retired MCI director V. Orville Wright, the 64-year-old McGowan, who helped break up American Telephone & Telegraph Co., predicted another revolution. Soon, he said, the dozens of national phone companies that provide long-distance services would consolidate into a handful of global consortiums.

McGowan could afford to kick back and peer ahead. Last December, he turned his \$9.5 billion company over to new chief executive, Bert C. Roberts. Now, Roberts says he'll continue McGowan's single-minded devotion to the core business. While AT&T wrestles with both the cellular and phone-fax markets and Sprint seeks to buy Celcelis, the local-phone cellular company, MCI is sticking to long distance (chart).

That doesn't mean that Roberts, who is likely to be named CEO,

MCI'S PURE-PLAY STRATEGY

SHARE OF 1991 REVENUE FROM LONG-DISTANCE AND RELATED SERVICES





Global Communications—Close at Hand

gives you global communication tools as convenient as your briefcase. In any time zone, in any office. We'll help you take your business further, but keep you closer to your customers, your sales, your target.

has a global presence our competition can't match. We speak your language, know the culture. Our TYMNET® Global Network Services reaches 90% of the world's business centers in more than 100 countries. We monitor our own technology, and bill in one currency, offering a single-vendor solution that makes your life easier.

We help you plan your network, manage it, make sure everything plugs in where it should and meets the regulations it should, at locations worldwide. Our Global Network Services™ (GNS) bring your far-flung divisions closer, with international messaging, frame relay, transaction services, and EDI.

Grab the BT briefcase. Call **1-800-872-7654** (US) or **1-800-874-7654** (Canada). BT North America, 2560 North First Street, PO Box 49019, San Jose, CA 95161.

**Global Network Services • ExpressLANE™ Frame Relay/LAN Interconnectivity
Videoconferencing • EDI+NET® • BT Messaging Services • Electronic Transaction Services**



chairman on June 23, plans to sit still. The 20-year MCI vet has set three main goals: He wants to increase MCI's 16% share of the \$55 billion U.S. long-distance market, grow internationally, and keep the company lean and mean. "The can-do spirit will continue to be part of the company," Roberts promises.

Worthy goals, but the drive for greater market share makes some investors nervous. By adding customers, MCI can defray the fixed costs of its network. But snatching business from AT&T demands expensive marketing—and runs the risk that AT&T will resort to fresh price cuts. Wall Street hopes that a recent firming of long-distance prices will continue. "People would like to see a more benign, oligopoly-like situation," says John M. Shapiro, managing director of Chieftain Capital Corp., which owns 600,000 MCI shares. Roberts says he hopes to add customers profitably through better products and targeted price cuts. Analysts expect MCI revenues to jump 11%, from \$9.5 billion in 1991 to \$10.5 billion in 1992, outpacing the industry's average growth.

'WE WHUPPED THEM.' Part of the growth has come from some big new contracts. Last year, an outage in AT&T's East Coast network caused nationwide air-traffic delays. While denying that it was reacting to AT&T's failure, the Federal Aviation Administration subsequently handed MCI its biggest contract ever, potentially worth \$864 million. "We just whupped them," gloats Michael Serboušek, an MCI deputy program manager.

In residential service, too, MCI has proved its mettle. Its 15-month-old Friends & Family discount program has added about \$500 million in annual revenue and caught competitors off-guard. "We didn't expect it to be as successful as it turned out to be," admits Chairman William T. Esrey of Sprint, which rolled out its own program on June 1.

To grab more of the booming global market, MCI is trying to form partnerships with dominant foreign carriers. Roberts argues that AT&T's size scares off potential foreign partners, and he contends that Sprint isn't secure enough to cut similar deals.

The toughest job for the taciturn Roberts may be preserving the *esprit de corps* that McGowan sparked. In signs of creeping corporatism, MCI recently moved into a gleaming new headquarters near the White House, and it now has four jets. Success could change MCI for the worse. "Many great companies have died of their own weight," Roberts says. That'll be just one pitfall to avoid once he steps into McGowan's shoes.

By Mark Lewin in Washington, with Peter Coy in New York

FOOTBALL'S OWNERS MAY BE SACKED BY A JURY

Players lost a strike over free agency, but the odds look better in court

One thing you can say for the 28 owners in the National Football League: They're every bit as hardheaded as the players who bash one another around on the field.

The owners have been at war with the NFL Players Assn. since 1987, when the players lost a strike whose main issue was free agency. Afterward, the players sued the NFL on antitrust grounds, saying that it illegally restricted players' rights to sell their skills to the highest bidder. After several years of courtroom skirmishes and crucial rulings against the owners, the two sides on June 15 will begin to play out this grudge match before a Minneapolis jury.

A LOT TO LOSE. There may be a last-minute agreement, but don't bet on it. And if the owners lose the court case, as many legal experts expect, the league may face what could amount to hundreds of millions in damages and higher salaries—a lot more, possibly, than they would have to give up in a settlement. "It makes a lot of sense to settle before trial," concedes Harold Henderson, the owners' chief labor negotiator. "But that's not too likely."

The trial, in the Minneapolis courtroom of U.S. District Court Judge David S. Doty, pits New York Jets running back Freeman McNeil and seven other current and former players against the league. The NFL will argue that it can't function without restricting players' movement—even though free agency hasn't killed baseball or basketball. "The odds are on the players' side in terms of a jury verdict," says Gary R. Roberts, who represented the NFL before joining Tulane University as a law professor.

NFL Commissioner Paul Tagliabue has been leading owners away from their opposition to free agency since he took

office in 1989. Last year, he created a new labor committee headed by Henderson. In October, the NFL put free agency on the table for the first time.

The initiative didn't get very far. The owners are willing to grant free agency only to players with six years in the league. The players, whose average career is less than four years, want a lower number. The owners also insist that because football teams are built around key players such as quarterbacks, the

must be allowed to prevent two or three top performers from coming free agents. But the best players also set the pace for all other salaries. If they're excluded, players argue, the basis of a free agent market would be undermined. "We have a conceptual gulf between us," says Bill Flier, the Buffalo Bills' general manager and member of the owners' labor committee.

Free agency might stand a better chance if the two sides could agree on a salary cap. The owners



THE JETS' MCNEIL: CARRYING THE BALL FOR THE PLAYERS

ers want a system like the National Basketball Assn.'s, where teams can spend only 53% of league revenues on salaries. But football salaries last season equaled 54% of revenues, a hit 60% in 1989. The NFL may be willing to set a cap in that range, but the two sides can't agree on the precise level.

The owners may come back for a final round of talks prior to June 15. But a 11th-hour settlement is unlikely, because the issues are just too complex. One way or the other, NFL owners seem headed for something many swore they would never grant: free agency.

By Aaron Bernstein in New York

BUICK PARK AVENUE: 'The Best American Car Value'

—The Complete Car Cost Guide*



Every year, IntelliChoice, publisher of *The Complete Car Cost Guide*, issues its independent survey of the best automotive values. It factors in not just purchase price, but also the cost of

depreciation, financing, insurance, fuel and taxes. Its conclusion? The best American car value is the 1992 Buick Park Avenue.

Lease a Park Avenue for \$399 a month.

Example**:

Down Payment	\$1,000	\$0
36-Month, 45,000-Mile Lease.	\$399¹	\$429²

Right now, special SmartLeaseSM terms make it even easier to enjoy Park Avenue luxury, comfort, safety and style. With 3-year terms

tailored to your driving needs.

Down payment options that fit your financial plans.

And a special Luxury Lease for those who qualify.

Visit your Buick dealer now. Because while Park

Avenue quality and value may last...this special lease offer ends June 30. For more information, please call 1-800-4A-BUICK.

*The Complete Car Cost Guide is a publication of IntelliChoice, Inc., San Jose, CA.

**Tax, license, title fees and insurance extra. GMAC must approve lease. Examples based on Park Avenue with the SD Option. \$27,796 MSRP, including destination charge. Option to purchase at lease end for \$12,508.20. Mileage charge of 15 cents per mile over stated maximum. Lessee pays for excessive wear and use. See your participating Buick dealer for qualification details. May not be available with other incentives from Buick, General Motors or GMAC. You must take delivery from dealer stock by June 30, 1992. Not available in Alabama and Texas, where other special lease terms are available. ¹ First month's lease payment of \$398.87, plus \$425 refundable security deposit and down payment of \$1,000 for a total of \$1,823.87 due at lease signing. Total of monthly payments is \$14,359.32. ² First month's lease payment of \$428.71, plus \$475 refundable security deposit and zero down payment for a total of \$903.71 due at lease signing. Total of monthly payments is \$15,433.56. Buckle up, America! ©1992 GM Corp. All rights reserved. Park Avenue is a registered trademark of GM Corp.



BUICK

The New Symbol For Quality
In America.

In Business This Week

EDITED BY JOAN WARNER

OR BETTER YET, GIVE HIM A TIE

Either mothers are better at making kids feel guilty, or fathers are just plain unappreciated. Nearly 50 million more people buy cards for Mother's Day than for Father's Day. And parents in general lose out to valentines

Occasion	Cards sold
CHRISTMAS	2.3 billion
VALENTINE'S DAY	1.0 billion
EASTER	165 million
MOTHER'S DAY	150 million
FATHER'S DAY	101 million
GRADUATION	81 million
THANKSGIVING	40 million
HALLOWEEN	28 million

DATA: GREETING CARD ASSN

APPLE'S CORPS KEEPS GROWING IN JAPAN

► Apple Computer plants more seeds in Japan every day. On June 10, Apple announced a deal to let Minolta Camera sell Apple products in Japan. This comes on the heels of a similar arrangement announced last month with Mitsubishi.

Apple has doubled unit sales of its Macintosh personal computers in Japan for each of the past three years. But with 6% of the Japanese computer market, it's still running to pass IBM, which had 7% in 1991. In the past year, Apple also has signed deals with Sony and Sharp to manufacture Apple products.

THIS DOGFIGHT GOES TO COURT

► The airfare wars have turned litigious. Weaker carriers have long complained that fare cuts by American Airlines were intended to drive them out of business. Now, that complaint has come to court. On June 8, Continental Airlines, under bankruptcy protection since December,

1990, filed suit in federal court alleging antitrust violations including predatory pricing. Shareholders of America West Airlines, also in Chapter 11, filed a similar motion in bankruptcy court. American responded with its own action, asking a federal court to declare its fares lawful. But the tiff is unlikely to provoke government action: A Transportation Dept. official says the agency won't step in. Neither will Congress—at least for now. Wendell Ford (D-Ky.), chairman of the Senate aviation subcommittee, says the panel will "let the [airlines] lawyers fight it out."

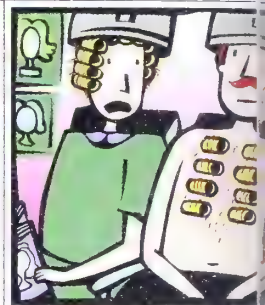
GENERAL INSTRUMENT GOES PUBLIC—AGAIN

► Less than two years after taking General Instrument private for \$1.6 billion, Forstmann Little has taken it public again. On June 9, GI floated 22 million shares, at \$15, for a take of \$330 million. That means the original \$200 million equity stake put up by several Forstmann Little partnerships and by management in the August, 1990, buyout has nearly tripled in value, to \$550 million. During the same period, debt at the maker of cable-TV and broadcast-satellite products has soared from zero before the deal to \$1 billion. Two proposals by GI and partner MIT are being tested this summer as part of the process to select a U.S. stan-

JUST A TRIM AROUND THE PECS, PLEASE

In Hollywood, having every hair in place doesn't just refer to coiffure. Salons up and down Rodeo Drive in Beverly Hills are doing a thriving business grooming the body hair of men who want to make the most of their open-to-the-navel silk shirts or flaunt their muscle definition on the beach. A waxing costs \$50 and hurts like hell, but the hairy-backed emerge clean as a whistle, with a Rambo-smooth chest to match.

Not all clients favor the hairless look. Umberto Men reg there is heavy demand from clients who want their hair trimmed to 1/8 inch, while LEMAIRE Hair is stocking up on blonde dye for aging studio execs who want their graying chest tinted. And when do these studs hit the chairs? Usually around 7 a.m., whisper those who know for sure, because the members of Hollywood's power elite clutch their secrets close to their chest.



dard for high-definition television transmission.

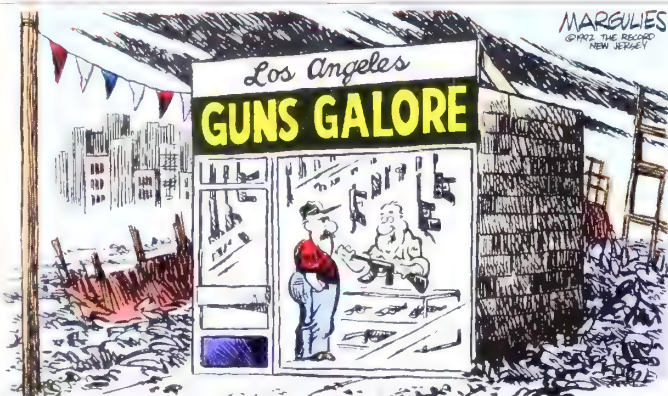
PRIME COMPUTER IS REINVENTING ITSELF

► Prime Computer's life as a troubled LBO may be coming to an end. The company plans to spin off its shrinking mini-computer business to managers in a corporate makeover that also calls for the sale of \$600 million in stock and new debt. The issues would create a \$1.2 billion company, Computervision, composed of Prime's computer-aided design and manufacturing (CAD/CAM) and repair business. American Express,

which now holds \$530 million of Prime's \$1.4 billion in capital, would receive partial repayment and gain a one-third stake in the new company.

SEATTLE KEEPS ITS 'LOCAL' TEAM

► Perhaps it was inevitable that Nintendo would become as American as baseball. But it'll take a majority vote of Major League Baseball to make it so. On June 10, owners were expected to allow the Seattle Mariners to accept an offer from an investor group that includes Japan-based Nintendo founder Hiroshi Yamauchi. Baseball leadership balked for months at handing over control of a franchise to a non-North American investor. So, the Baseball Club of Seattle investor group may late-inning lineup changes. It reallocated Yamauchi's share of the \$125 million estimated purchase price to \$48 million in equity, while proposing to use an additional \$27 million of his dough for operating costs. John Ellis, chairman of Puget Sound Power & Light and a co-investor, will run the team, giving baseball owners the "local ownership" the league sought.



"Not only is business booming, but Washington's giving me a fat tax break for operating in an enterprise zone!"

AFTER PUTTING EACH OF OUR HOTELS THROUGH 900 DIFFERENT TESTS THERE'S ONE MORE THING WE DEMAND OF THEM.

It's not easy to become a Preferred Hotel.

To be accepted for membership a hotel must submit to one of the most exhaustive and demanding examinations imaginable.

If they pass these tests (90% do not), there's one last condition they must meet: They must welcome the American Express® Card.

You see, the American Express Card is accepted everywhere Preferred Hotels® are located. And there are



more than 1700 American Express travel locations* worldwide to help guests with travel plans. Plus, only the American Express Card offers Global Assistsm for worldwide emergency medical and legal referrals.

There are over 300,000 hotels and resorts



in the world. At present, only 105 are Preferred. And every one of them proudly welcomes the American Express Card.

For a free directory of all 105 Preferred Hotels and Resorts Worldwide, call 1-800-237-7254.

Or call your travel agent and ask if there's a Preferred Hotel where you're planning to visit. And be sure to ask for an American Express® Card Assured Reservation** when you call.

*Travel Service locations of American Express Travel Related Services Company, Inc., its affiliates and Representatives.

**Be sure to ask about restrictions and cancellation requirements when you call.

©1992 Preferred Hotels® & Resorts Worldwide. All rights reserved.

How To Read A Letter.

At Lexmark, we take a close look at every aspect of printing to make sure your IBM equipment delivers maximum performance.

LINK:
To avoid the missing link, use an IBM typewriter ribbon. Some of our ribbons yield up to 240% more characters than other ribbons.

LOOP:
Don't be thrown for one if your toner isn't printing all the little details properly. Our toners reproduce the elegance of your fonts to the letter.

EAR:
Our researchers tested over 7,000 miles of typewriter ribbon last year to ensure every detail is letter perfect.

COUNTER:
The white space in this character should always be free of ink. A cluttered counter is usually the mark of inferior toner or ribbon.

BOWL:
Should be black and continuous. An IBM toner by Lexmark ensures high quality printing.

At Lexmark, we take the integrity of the printed character very seriously. That's why we are constantly testing and improving our IBM[®] toner cartridges and typewriter ribbons to give you top performance. And incredible high yield for your dollar. You know, the reasons you bought IBM equipment in the first place.

And since every printed image your company generates is a direct reflection of your company's image, shouldn't you put your best typeface forward?

To order, to find the dealer nearest you, or to receive your free catalog, call 1-800-438-2468. Ext. 10. (In Canada, call 1-800-663-7662.)

Lexmark is the worldwide developer, manufacturer, and distributor of IBM personal printers, typewriters, keyboards and related supplies.



IBM Supplies by

LEXMARK[™]

Make Your Mark

BUSINESS PACs: NOW, OUTSIDE CANDIDATES HAVE THE INSIDE TRACK

Invest in Your Future." For years, political-relations manager William B. May used this bland slogan to entice Chevron Corp. employees to pony up for the company's political action committee. Not this year. C-PAC's motto is "Fight Back." Rather than follow the PAC managers' handbook and give early and often to incumbents, plans on holding much of his money until fall. And he's getting 40% for challengers and newcomers. "This is an extremely volatile election year, one like we have never before," he explains.

Once becoming a major factor after campaign-finance reforms of the mid-80s, PACs have been a crucial part of incumbents' safety net. For most business PACs, a politician's committee assignments were more important than money, and challengers were usually seen off as bad bets.

It's not with a record number of seats or grabs, and with anti-incumbent efforts making even once-unassailable incumbents look vulnerable, stunned PACs are tossing out the book. "Man, it's a PAC this year," says American Telephone & Telegraph Co. spokesman Linnen, "is going to be an out-of-experience."

WINNING TWICE. PAC behavior to date is leading. Federal Election Commission data show that during the 15 years ended Mar. 31, incumbents had received 97% of the million disbursed by PACs. That's ancient history. Since then, 12 congressional incumbents have been tossed out in primaries, and almost 60 have quit. Some analysts forecast the runoff of up to 150 new House members and 15 senators. They're urging PAC managers to step back, take a deep breath, and rethink their strategy," says Bernadette Budde,

who advises corporate PACs. Adds Steve Stockmeyer of the National Association of Business PACs: "Anybody thinking about giving a few bucks to their favorite committee chairman this year is really missing the boat."

Labor PACs are recasting their strategies, too. "For once, we have a terrific opportunity to really shape a new Congress," says Janice Lachance, political director of the American Federation of Government Employees. Unions, she says, will make "a lot more individual assessments rather than blanket endorsements" of safe incumbents.

BELTWAY BEGGING. The result, say both business and labor lobbyists, is that some powerful incumbents—who are used to getting PAC handouts whether they need them or not—are going begging, as managers hoard their cash for competitive fall races. "If you have money in the bank, you're an incumbent, and you're safe, don't come to us," says Mark Bolduc of the Mortgage Bankers Assn. Eaton Corp.—whose somewhat radical PAC has long stressed throwing the bums out—has \$200,000 on hand and plans to give 80% to probusiness outsiders, says manager John W. Hushen.

There'll be plenty of special-interest PAC money floating around this election. The American Medical Assn. PAC has \$3 million on hand. The FEC says that, in all, PACs had more than \$139 million cash at

the end of March, up 6.5% from the same time two years ago.

For now, many PAC managers are content to sit on their money, waiting to see how the most unpredictable election in years shapes up. But once the cash starts flowing, odds are good that challengers, who've long blamed PACs for protecting incumbents, may finally get their share of the largess.

By Douglas Harbrecht with Susan B. Garland

THE TOP 10 CORPORATE PAC HOARDS	
Corporate sponsor	Cash on hand*
WINN-DIXIE STORES	\$968,276
NATIONSBANK	949,527
UNITED PARCEL SERVICE	760,932
CENTRAL BANCSHARES OF THE SOUTH	530,645
SUN BANKS	497,091
AT&T	450,421
COOPER INDUSTRIES	389,890
UNION PACIFIC	371,835
STONE CONTAINER	321,149
COASTAL	312,139
*AS OF MAR. 31, 1992 DATA: FEDERAL ELECTION COMMISSION	

TAL WRAPUP

ERNORS

Sometimes it may be easier to beat somebody with nobody than with a candidate. New Jersey Democrat Governor Jim Florio has been on ropes since a 1990 round of tax cuts. A poll by Philadelphia TV station shows that only 39% of the state's voters think he has done a "good" or "excellent" job. And 66% would consider another candidate or would defy a vote to replace Florio in 1993. Likely Republican opponent Chris-Todd Whitman isn't reaping much benefit from the discontent. Whitman came within a whisker of upsetting Senator Bill Bradley (D-N.J.) in

1990, holds only a 35%-to-33% lead over Florio in the same poll.

REGULATION

It is difficult for President Bush to get nominations confirmed this late in his term. And Securities & Exchange Commission General Counsel James R. Doty, who is the leading candidate for an SEC seat, could get a particularly tough going over. Doty was once a lawyer for first son George W. Bush. Chairman Richard C. Breiden, himself a former Bush aide, has been criticized as being too political, and Democrats in the Senate are likely to view Doty's nomination with a jaundiced eye.

FLORIDA

In a year that promises heavy turnover in the House, the Sunshine State could set the pace for political upheaval. With the June 8 announcement by veteran Democratic Representative Charles E. Bennett that he won't seek a 23rd term, 9 of Florida's 23 congressional districts will have no incumbent running. Four are newly created districts, while five members are retiring. The election could also see a further shift to the Republicans, who hold a 10-9 edge among Florida members. The influential *Cook Political Report* shows the GOP leading in 10 districts, with five rated toss-ups.

GOOD MORNING, VIETNAM!

AS THE TRADE EMBARGO WEAKENS, U.S. COMPANIES ARE SET TO MOVE FAST

For Nguyen Hong Nhi, it was quite a dose of Southern hospitality. From May 28 to June 1, at the expense of host Delta Air Lines Inc., Nhi toured the carrier's Atlanta headquarters, got to "fly" a Boeing 767 flight simulator, and was even shown around Walt Disney World, where he was photographed next to a Wookie, the hairy co-pilot from the *Star Wars* movies. Even for a certified war hero, it was a lot of attention.

Especially a war hero from Vietnam. As a North Vietnamese pilot flying a MiG-21, General Nhi is credited with shooting down eight U.S. warplanes. Now, he's general director of Vietnam Airlines. And Delta isn't the only one out to win his favor. Rivals United Airlines Inc. and Northwest Airlines Inc. are also trying to convince Nhi that they are the best partners to begin service to Vietnam. Mindful that Vietnam Air is in the market for a fleet of widebodies, Boeing Co. and United Technologies Corp.'s Pratt & Whitney Co. are getting to know the general, too.

STEP BY STEP. After 17 years of forced separation, Corporate America's courtship of Vietnam is suddenly gaining intensity, and the U.S.'s economic embargo against Vietnam is crumbling. In response to Hanoi's growing willingness to cooperate in accounting for missing American GIs, Washington is relaxing the sanctions step by step—and it is expected to officially lift the embargo after the November election.

But the embargo is already porous for many American brand names, such as Coca-Cola, that were widely available during the war. They can be found just about anywhere in Vietnam today, with Wash-

ington turning an increasingly blind eye.

What's egging the Americans on is fear of losing out. Dozens of Asian and European companies have long been jockeying for future market share by defying the embargo. Japanese companies such as Tomen and Mitsubishi are buying up elegant French colonial mansions for the day the embargo ends. Worried about losing Vietnam as a market, such blue-chip U.S. companies as Citibank and American Telephone & Telegraph Co. are revving up to lead the campaign back.

In sharp contrast to the old "domino theory," the embargo's end could set off a chain of dominoes leading eventually to

Vietnam's debut as Asia's newest tiger. First, ending the embargo will be a critical step toward restoring diplomatic ties with the U.S. That will free up billions of dollars in critically needed international financial help, including World Bank funding.

TAKEOFF. Initially, most of the money will go to repaying Vietnam's \$160 million foreign debts and building badly needed highways, phone lines, container ports, and power plants. Once the infrastructure is in place, experts foresee rapid growth. Within a decade, the country could join the ranks of such developing Asian economies as Indonesia, Malaysia, and Thailand. "There's a feeling here that Vietnam's takeoff really

won't begin until the embargo ends," says Eugene Matthews, an American attorney who is the only U.S. business consultant in Hanoi.

Even though the Americans are late, they'll be competing from a position of strength. The Vietnamese, eager to avoid domination by the Japanese or overseas Chinese, are avidly seeking a greater U.S. presence as a counterweight. Oddly enough, the U.S.'s wartime experience and its 1 million Vietnamese-Americans could give it an edge.

The rush to do business is happening even though Vietnam is still ruled by a totalitarian regime. The communist government has allowed the South to grow rapidly, in part for economic survival. The country is among the world's poorest, with a per capita income of only \$200 a year. But if economic liberalization leads to demands for political change, some experts fear it could trigger a Tiananmen-style clampdown.

Uncertain, too, is whether trading with the former enemy will lead to a U.S. political



LOADING UP: COKE IS IN MARKETS AND RESTAURANTS NATIONWIDE

lash. Vietnam's emergence will cathartic event for many in the , where many people still have memories of the war. Those ories have already become a r in the 1992 Presidential cam- n, with Vietnamese officials ing that candidate Ross Perot n scouting business deals in after his representatives made rous trips to find American air- missing in action. Perot is tuled to testify before a Senate on June 30.

AMOS. Even though tricky ems remain, Vietnam's raw ap- is huge: It has lots of natural rees ranging from oil and coal ld, \$30-a-month labor, and a do- c market of 66 million people. o labor and untapped markets a increasingly short supply in egion. And the country is now unded by Asian dynamos, such uth Korea, Singapore, Taiwan, long Kong, that are competing en trade ties.

w, American businesses are slipping through the embargo. amous Ho Chi Minh Trail is a major smuggling route for ican-brand goods, such as Coca-Cola ylenol, made in Thailand. More than ietnamese-American refugees, work- scretely in Ho Chi Minh City (former- gon), are investing in restaurants, ho- and property development. Urban ets are choc-a-bloc with gray-market cts, such as Procter & Gamble's Pam- Colgate toothpaste, and H. J. Heinz ap.

what big U.S. companies want is a -and legitimate—share of the busi- To prepare for that day, a growing er of American service companies are e move. Citibank shuttles executives he country at least once a month, hop- snag the first U.S. banking license Washington approves. It already has ice in Hanoi, staffed by a local Viet- se, and the U.S. Treasury Dept. has it the go-ahead to transfer money to am if the amounts are small and the ents are families of Vietnamese emi- n the U.S. San Francisco-based Bank



AMERICAN ATTORNEY MATTHEWS IN HANOI: POINT MAN FOR U.S. BUSINESSES SEEKING A Foothold

of America has a similar arrangement.

The Big Six are there, too. Accounting firm Ernst & Young even has an office in Hanoi. How? Its unit is owned by a franchisee in Hong Kong that isn't under the jurisdiction of U.S. law. Price Waterhouse operates part-time in Vietnam through its Hong Kong partner. The Sydney affiliate of public relations firm Hill & Knowlton Inc. is represented in Vietnam by former Australian diplomats.

American air carriers are preparing for President Bush's approval of flights from the U.S., a move that could come within months. With its tropical climate and many miles of beachfront—some of which, including China Beach in Da Nang, are well-known to Americans—the travel industry sees Vietnam as a potential new tourist mecca. Delta officials say Chairman Ronald W. Allen envisions linking service from the carrier's planned hub in Taipei to Ho Chi Minh City. As part of a deal with Vietnam Airlines, Delta may also help train pi-

lots and cabin crews and give advice on maintenance, marketing, and catering.

Other American companies hope to pick up where they left off. Engineering companies, such as Bechtel Group, which built roads, air fields, and seaports for the U.S. military, hope to land contracts to refurbish or expand those facilities for commercial use. Caterpillar Inc. also sees Vietnam as an inviting market because many of its 1970s tractors and earthmovers are still in use. Eyeing potential sales of up to 5,000 tractors, execs are dropping in from Bangkok and Singapore frequently. Company spokesmen confirm Cat's interest.

INFLUX? Some hard-liners in the top ranks of the U.S. government have long opposed business contacts, but they have softened their stand noticeably. The disappearance of Soviet forces from Vietnam and the change in Hanoi's policy toward Cambodia mean there is no geopolitical reason for keeping Vietnam isolated. Likewise, influential members of the American POW-MIA

THE U.S. BLUE CHIPS EYEING VIETNAM

Listed in order of potential scale of investment

DATA COMPANY REPORTS, BW

MOBIL, CHEVRON, EXXON, AMOCO
Rich offshore reserves

AT&T, MCI, SPRINT
Huge telecommunica- tions needs

DELTA, UNITED, NORTHWEST
Direct air service for tourists and émigrés

BOEING, GE, PRATT & WHITNEY
Airplanes and engines

COCA-COLA, PEPSI, COLGATE
Budding consumer market of 66 million

CITIBANK, BANK OF AMERICA
Reestablish Vietnamese branches

ERNST & YOUNG, PRICE WATERHOUSE
Accounting, consulting

CATERPILLAR
Farm and construction equipment

BECHTEL, FLUOR
Highway, sanitary, and building needs

International Business

lobby are impressed with Vietnam's near-eagerness to cooperate. "Overall, the progress has been very good," says Senator John McCain (R-Ariz.), a member of the POW-MIA committee and the only senator who was a prisoner in Vietnam.

As a result, Washington is showing surprising flexibility in making sure competitors don't lock up strategic sectors. Take airplanes. Vietnam Airlines badly wants jumbo jets to serve the growing demand of business travelers and an expected influx of tourists. Unable to buy Boeing jets, Vietnam Air placed orders with Airbus Industrie two years ago. But Washington blocked the sale by threatening to cut off Airbus' access to American-made components, including Pratt & Whitney engines. But in January, Washington did allow Vietnam Air to use two Boeing 737-300s through a creative arrangement: A Swiss charter company bases them outside of Vietnam. Now, sensing the end of the embargo, Boeing says it has intensified its marketing. Pratt's engines are also on Airbus aircraft flying the Singapore-Ho Chi Minh City route. Washington gave its O.K., provided the aircraft do not spend the night in Vietnam.

Whether intentional or not, the cola wars have already broken out in Vietnam, with Coke in the lead. The Real Thing is freely available in markets and restaurants across the country, and government officials even serve it at dinner receptions. Some supplies are smuggled in from Thailand and Cambodia, but the main source is F&N Coca-Cola Pte. Ltd., a bottling joint venture between Coke and Singapore's Fraser & Neaves Ltd. Coke owns 25% of the unit, and a Coke executive is president. Yet a Coke spokeswoman in Atlanta says any sale of the company's product in Vietnam must be coming from unauthorized parties.

PHANTOM OFFICE? In contrast, Vietnamese officials say PepsiCo Inc. in December struck a \$3.4 million deal through a Hong Kong company, MacCondray & Co., to build a bottling plant with Vietnam's top domestic soft-drink producer. Only MacCondray's name appears on contracts, but Pepsi's involvement is spelled out in government documents that *BUSINESS WEEK* reviewed in Vietnam. The "headquarters" of MacCondray, which does not have a listed phone number, is a small office in Hong Kong that is also the registered address of

250 other boiler-room companies. The Vietnamese partner, SP & Co. in Ho Chi Minh City, has a nationwide distribution network that controls 20% of the fast-growing market. Pepsi says MacCondray is its consultant, but denies Pepsi has made any investment in Vietnam.

To avoid taking the politically sensitive step of lifting the sanctions before the elections, Washington seems deliberately vague about what it will and won't allow. In April, the White House let AT&T and Sprint Corp. offer direct phone service to Vietnam. That apparently initiated phase two of the Administration's four-step plan to normalize relations. And pharmaceutical, agricultural, and personal care companies may sell their products on "humanitarian" grounds. But any deals must be approved by the Treasury Dept., and the rules are still vague. Companies can dis-

that effect in the public record," he says. "But violations are now so widespread there's a sense that American companies will be screwed if they don't get in the door."

One major question mark over Vietnam's future is what impact a rush of and other foreign economic ties will have on the Politburo's ability to manage the country. So far, the communist rulers are showing flexibility by privatizing some companies and embarking on free-market reforms. "Socialism is out the window," says Nguyen Xuan Oahn, one of several high-ranking officials from the old Saigon government who are now economic advisers to Hanoi. Already, free-market reforms in the countryside have converted Vietnam from a food importer to the world's third largest exporter of rice.

SURPRISES. Because the South is bending most, however, it seems only a matter of time before old jealousies between North and South reassert themselves. Particularly sensitive is the presence of Southern millionaires such as Huynh Thieu Chung, who put \$20 million in family savings into a tiny clothing factory. Now, the 24-year-old Chung is dripping in gold jewelry as he directs a 1,500-worker Hong Kong Co. The company expects to ship \$6.5 million worth of intricately embroidered silk kimonos to Japan, where they sell for more than \$2,000 each. The politics of normalizing ties with Vietnam could also produce surprises. Perot's sudden strength and Bush's



INROADS: THE HANOI OFFICE OF ERNST & YOUNG'S HONG KONG FRANCHISEE

cuss an investment, but they may not sign contracts or open a representative office.

Oil is a particularly sensitive area. Dallas-based Hunt Oil, an independent explorer, has sent three delegations to Vietnam since 1988. "Everyone is looking at Vietnam. It's an area of great oil-and-gas opportunities," says Tom Meurer, Hunt's senior vice-president. Government officials in Vietnam say Mobil, Chevron, and Amoco have negotiated leases to develop the country's offshore oil reserves, pending Bush's go-ahead. A Mobil official, on the other hand, says its talks were not productive and were recently broken off pending the embargo's end. Amoco and Chevron confirm that they have had talks but have reached no agreements.

A U.S. diplomat familiar with Vietnam agrees that except for high-profile activities, the Administration is now lax on enforcement. "You won't see anything to

weak political standing suggest Washington will have to move carefully. "The Administration will do nothing to give Perot ammunition to suggest that the U.S. is selling out its POW-MIAs," says Frederick Z. Brown, a fellow at the Foreign Policy Institute of Johns Hopkins University.

But in Vietnam, Southerners in particular are looking forward to an American turn. In their eyes, it would mean better times again. "Before 1975, everybody wanted the Americans to go," says a 31-year-old taxi driver in Ho Chi Minh City. "But when the Vietcong came, they had no money. We want the U.S. to come back. At least for the moment, it seems like he'll soon get his wish."

By Pete Engardio in Hanoi, with A. Borris in Washington, Chuck Hawkins in Atlanta, Dori Jones Yang in Seattle, and Russ Mitchell in San Francisco, with bureau reports

VAN KAMPEN MERRITT MUNICIPAL INCOME FUND

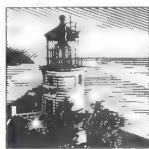
Tax-Free Income... From Towns Across America.

With a diversified portfolio of municipal securities, the Van Kampen Merritt Municipal Income Fund seeks to offer a high current income, tax-free* way to preserve capital and receive regular, steady current income every month.

This fund gives you the advantages only a professionally managed tax-free fund provides. With a low minimum initial investment and easy

access it's convenient for small investors or a larger portfolio.

Find out how you can achieve a high tax-free income. Ask your investment representative, or call us direct, for a prospectus containing more complete information, including all charges and expenses. Read it carefully before you invest or send money.
Call 1-800-DIAL-VKM (1-800-342-5856) ext. 1112.



Van Kampen Merritt®

A XEROX Financial Services Company

INVESTING WITH A SENSE OF DIRECTION®

*A portion of the interest income may be subject to state or local taxes. The Fund may invest in securities which will subject certain individuals and corporations to the Alternative Minimum Tax (AMT). ® denotes a registered trademark of Van Kampen Merritt Inc.

WILL YELTSIN GET THROWN FROM THE TRAIN?

His fast-track reforms may be too big a shock—but retreat is risky

It has an eerie feeling of déjà vu. To buy labor peace, Moscow's mint is running at full speed, spitting out 5,000-ruble notes. In Parliament, conservatives are stalling key bankruptcy and privatization laws. Three seasoned socialists, former managers of giant state enterprises, are added to the highest levels of Russia's reformist government. Warns Moscow's prodemocratic newspaper, *Nezavisimaya Gazeta*: "It could be the transition to a cabinet of Communists."

After nearly six months of fast and bold reforms, it's an unnerving turn of events. Russian President Boris Yeltsin has reached a crossroads. He must decide if the next phase of change—a vast industrial restructuring and sell-off—should be slowed down because resulting mass unemployment could sink his government. But Yeltsin also knows that if he abandons the fast track, he risks having his reforms sandbagged by the same brand of bureaucrats who derailed former Soviet President Mikhail Gorbachev.

BALANCING ACT. A retreat from shock therapy also could hurt prospects for \$24 billion in aid that has been promised, but not yet paid, by the Group of Seven industrialized nations. Worse, officials from the International Monetary Fund say that the government's printing of billions of fresh ruble notes could seriously undermine the currency and upend Yeltsin's pledge to keep monetary policies tight. That could jeopardize a proposed \$6 billion ruble-stabilization fund.

The issues will weigh heavily when Yeltsin meets with President Bush in Washington June 16-17. Bush already has bad news for Yeltsin: It's highly unlikely that Congress will approve the U.S. share of the \$24 billion aid package by the time of his visit. Even so, the White House remains strongly support-

YELTSIN: PRESSURE FROM CONSERVATIVES



A STATUS REPORT ON YELTSIN'S REFORMS

CONVERTIBILITY Ruble to float against the dollar in July. Ruble's value likely to plunge because of delayed launch of \$6 billion stabilization fund

MONEY Billions of rubles are being printed to ease a cash crunch. Credit remains tight with interbank interest rates at 80% and still rising

PRICES Freed on most goods and rising 10% to 15% per month. Crucial oil price liberalization moving slowly to avoid additional inflationary shock

PRIVATIZATION Stalled by political squabbles in Parliament. Yeltsin hopes to issue vouchers for sell-offs by yearend

STATE ENTERPRISES Hurt by a 15% drop in production and debts of 2 trillion rubles

DATA: ENW

ive of Yeltsin. "He's looking for a way to keep his critics at bay," says Ed A. Hewett, a senior Russian expert at the National Security Council. "We're not going to sit here and try to microcriticize how well he manages things."

For now, the task of finding the right economic balance still falls to First Deputy Prime Minister Yegor Gaidar, 36, the spunky architect of the initial reforms in January. He warns against dramatizing the recent events but admits "it means the possibilities for maneuver are decreasing."

Gaidar may find himself boxed in by a

new Deputy Prime Minister with equivalent power. The new official is Vladimir Shumeiko, a former director of an instrument plant with ties to the defense sector. Shumeiko, 47, favors a more gradual approach to a market economy. "It's very difficult to move from one economy to another," he says. "The spirit of entrepreneurship has been squeezed out."

A major point of conflict between Gaidar and Shumeiko has already emerged: selling off state assets. Gaidar has backed a highly democratic privatization program that guarantees everyone from

hers and pensioners to workers and industrial managers a shot at state assets. But Shumeiko wants the majority of assets to remain in state hands. If he goes his way, the Russian industrial landscape would be dotted by giant, locking, mostly state-owned companies, not unlike Japan's *keiretsu* or South Korea's *chaebol*. The conflicting approaches could slow implementation of the privatization program, which is still slogging its way through parliament.

Gaidar also has been stymied by an unexpected reaction to his policy of free prices last January. Factories, let go of their old Soviet ministries, were told to hike wages, raise prices, and stop buying and selling to each other on credit without ever paying their bills. As a result, they have run up debts to each other of more than 2 trillion rubles. Since the Russian government still owns most companies, the result is a gigantic pile-up in debt that is off the government's books. This could dampen Yeltsin's hopes of controlling his budget deficit. A flood of company IOUs could also add more pressure on the ruble if the government prints money to help pay the debts.

E CRUNCH. New money will immediately be sucked into the wage-price spiral. Salaries have risen about 10 times since January, but millions of workers haven't been paid because of a severe shortage of cash rubles. To fend off mounting strikes, Gaidar has given the Russian mint an astounding order: to triple the number of ruble notes printed each month by this fall. Yet at the same time, the central bank is charging interest rates as high as 80% in a bid for monetary discipline. Says one Western banker in Moscow: "How can you run a tight monetary policy when the ruble has lost its meaning?" In spite of all the problems, Gaidar hopes Russia will reach agreement with the IMF this summer on an aid package. He still plans to unify exchange rates and float the ruble against the dollar to make it convertible in July. But other former Soviet republics plan to introduce their own currencies. They have yet to agree with Russia on a plan that would let the ruble interact with the new money. So, it's unlikely that the \$6 billion ruble-stabilization fund will be injected until near yearend, Gaidar says. That means the ruble's value is likely to plunge, at least in the short term. Given the enormity of the task, it's not surprising that Yeltsin's economic advisers are hitting bumps. Pro-reform Russians now hope Yeltsin doesn't stray from course.

Rose Brady, with Karen Pennar in Moscow and Brian Bremner and Amy Poole in Washington



DAIMLER WILL PUT \$1.9 BILLION INTO A PUSH TO BECOME A GLOBAL MICROELECTRONICS LEADER
GERMANY

WHY DAIMLER HAS TO WIN ITS BIG GAMBLE IN CHIPS

Success is critical to the giant's growth in autos and aerospace

Daimler Benz has spent billions of dollars on acquisitions to try to transform itself from an auto maker into a high-tech conglomerate excelling at everything from telecommunications to jet planes. Now, in perhaps the most critical step toward that goal, CEO Edzard Reuter is set to lay out an additional \$1.9 billion—and even more later. In a bid to succeed in an industry where his European rivals have failed, Reuter is determined to become a global heavyweight in microelectronics.

Reuter doesn't have much choice. Whether in aerospace or autos, Daimler needs to become a leader in microelectronics if it hopes to stay competitive with the U.S. and Japan. For starters, Reuter on July 1 is combining Daimler's far-flung semiconductor operations into a single new unit. Unlike such other major European high-tech players as Philips and Siemens, Daimler's new venture will steer clear of standard memory chips, which have led to huge losses. Instead, it will make specialized chips that are custom-designed to control everything from automobile engines to computerized production lines.

Daimler executives worry that if they don't make their own chips they will be increasingly dependent on Japanese and

American technology for their next generation of products. It would mean sharing sensitive product knowhow with outsiders who design the chips. That's a risk the Germans don't want to take. One way or another, microelectronics influences two-thirds of Germany's gross national product, says Frank Dieter Maier, head of the new Daimler chip unit. With sales of \$54 billion, Daimler bought \$4 billion in electronic components in 1991.

OUT OF TOUCH? Daimler isn't alone. Other German industrial giants, such as Siemens and Robert Bosch, also are ramping up production of application-specific chips, called ASICs, and other logic products. In fact, the Germans are moving toward Japanese-style integration, where systems manufacturers and electronics companies often share space under the same *keiretsu* roof. Without a competitive chip operation, "[Daimler's] engineers will lose touch with fast-paced semiconductor developments that have a huge impact on their automotive electronics," says Tomihiko Matsumura, the senior executive vice-president who heads chip operations at NEC Corp.

Daimler already has microelectronic sales of nearly \$1 billion, but they are scattered among its AEG and Deutsche

Aerospace units, Siliconix in Santa Clara, Calif., and Matra MHS in France. But engineers were slow to push out new products, and quality didn't match that of Japan.

Daimler aims to solve those problems by forcing the new microelectronics unit to compete in global markets. To do that, Reuter is limiting in-house sales to 20% of production. He is also gunning for economies of scale by doubling microelectronics sales to \$2.4 billion by 1995. Although Daimler executives are forecasting a \$60 million loss on chips for 1992, they believe that the business can turn a profit within three years.

Despite Daimler's deep pockets, Reuter's bet is a risky one. Competition in the \$9 billion ASIC business gets hotter every day as well-heeled memory-chip

makers from South Korea to Tokyo to Silicon Valley seek to step up production of custom chips. To offset huge up-front investment in technology and equipment, Daimler will need to find partners. Its planned \$1.9 billion investment includes \$380 million for a new chip plant in Heilbronn and \$1 billion for research and development.

HARD KNOCKS. So far, Daimler is going it alone. Although Daimler and the Mitsubishi group have a two-year-old commitment to establish closer business links, Reuter has no plans for joint chip R&D or production with Mitsubishi. Maier also spurned a joint production proposal by LSI Logic's Munich office.

That means learning the hard way. Early this year, when Daimler sold bipolar chips to Mitsubishi Electric, Mitsubi-

shi rejected them, saying they were good enough. Daimler engineers doubled their efforts, revamping test procedures from start to finish on the production line. Says Maier: "It's a learning experience. It will pay off."

Daimler may get a boost from other German firms. In mid-June, Siemens, Bosch, Deutschland, and Daimler will ask the government to channel new funds into custom-chip R&D. The European Commission is also backing similar research. Even with some government help, the German effort to match the American and Japanese in chips is far from guaranteed. But for both Daimler and Bosch, no matter how bumpy the ride, there's no turning back.

By Gail E. Schares in Bonn, with Peter Gross in Tokyo and bureau reports

EUROPE

'WEIRD THINGS' ARE HAPPENING TO INFONET

Some of the data network's co-owners are backing its rival

Cracking Europe's mighty telecommunications monopolies is no modest proposition, but back in 1989, Infonet Services Corp. shrewdly did so. The El Segundo (Calif.) seller of data communications services persuaded the Continent's sheltered national phone companies that they needed to use Infonet's global network to send customers' data around Europe and beyond. Seven of them even bought into Infonet, scooping up 60% of its stock. Overnight, Infonet became a pillar in Europe's booming \$3.8 billion data services market, rivaling such giants as British Telecommunications and American Telephone & Telegraph.

But now, Infonet's own parents are starting to muscle in on its turf. On June 9, two shareholders, the national Dutch and Swedish phone operators, announced they'll launch a competing network hooked up to the 35-country system of Sprint Corp., an Infonet rival. The French and German operators, also Infonet co-owners, plan a similar joint attack next fall. "Some very weird things are happening," says Infonet Chairman Jose A. Collazo.

In Europe, this means that deregulation is making once-imperious phone companies run scared. AT&T, Sprint, Britain's Cable & Wireless PLC, and others



COLLAZO: DEFENDING INFONET'S EUROPEAN NETWORK

are vying to snatch away lucrative international traffic. Faced with this threat, some national telecom giants figure they can no longer entrust their crucial links with the outside world to a carrier they don't control. "We won't be satisfied by being just a good national operator anymore," says Charles Rozmaryn, France Telecom's chief operating officer.

CLASH OF TITANS. Already the French have snapped up data networks in Britain, Germany, Italy, and Sweden. By the end of 1993, they intend to enter 10 major European countries, as well as to expand an embryonic U.S. network. Unisource, the Swedish-Dutch joint venture, plans data- and network-management

services in 15 countries with extensions to the U.S. and Asia via Sprint. "It's going to be a competitive market," Dutch PTT Telecom director Ben Verwaayen.

Don't count Infonet out. Its revenues are growing about 35% a year, to an expected \$200 million in 1992, and its 46-country network now boasts some 38 million lines. The world market for transnational data services. That gives it a lead over its new rivals.

Increasingly, though, Collazo may find himself in the middle of a clash between ambitious Infonet co-owners. Already the Swedes and the Dutch have their backs up to the possibility that the French-German joint venture, called Eunet, could raid their market using Infonet services.

For now, most parties will probably hold tight—if only because an Infonet stake guarantees each owner the exclusive right to sell Infonet services in its national market. But partners may feel threatened by Infonet itself if, as expected, Europe deregulates the cash-cow voice calls that the monopolies now control. Already Infonet is starting to deploy technology to integrate voice, data, and video over a single line.

To keep the phone companies dependent on it, Infonet needs to stay at technology's leading edge. Otherwise, Europe's telecommunications superpower could fade away like a supernova.

By Jonathan B. Levine in Paris

LIMITED TIME OFFER
 MS-DOS™ 5.0 & Windows™ 3.1 included on all ALR Flyer 32LCT and Flyer 32DT hard drive models.



Did Your Last Relationship End Because You Needed More Space?

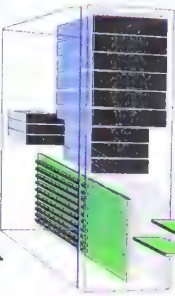
Before, the two of you got along fine in the beginning. Then your needs changed, you wanted more... and before you knew it, you'd completely outgrown your old PC. Well, don't be discouraged, because now there's a system at won't cramp your style.

Introducing the ALR Flyer 32LCT

The Flyer 32LCT gives you the expandability you'd expect to find in a full-featured tower system at the type of price you'd expect to pay for a desktop PC.

Starting at... **\$2,295**

With twelve drive bays, an industry standard expansion slots, built-in super VGA graphics, it's



22 MIPS
50-MHz
i486DX2™

14.8 MIPS
33-MHz
i486DX™

11.2 MIPS
25-MHz
i486SX™

the perfect system for growing networks or expansion hungry single users.

The Flyer 32LCT can even keep pace with your changing power requirements. When you outgrow the Flyer 32LCT's current processor, you simply plug in a more powerful one. **Just Upgrade the CPU!**



The Flyer Family also consists of some very powerful, upgradeable and economical desktop systems. The PowerFlex FLYER and Flyer 32DT... The Flyer Family also offers two complete multimedia workstations. The Flyer MPC and the FLYER 32 MPC... Prices start at just \$2,795



Model	PowerFlex FLYER	Flyer 32 DT	Flyer 32 LCT
CPU Options	i386SX/25	i486SX/20	i486SX/25
upgrades to	i486SX/20	i486SX/25	i486DX/33
		i486DX/33	i486DX2/50
		i486DX2/50	
Memory Arch.	16-bit	32-bit	32-bit
Standard RAM	1-MB	4-MB	4- or 8-MB
Maximum RAM	16-MB	36-MB	64-MB
Memory Cache	8-KB int.	8-KB int.	8-KB int.
	(i486SX only)		
Optional Cache		256-KB	256-KB
		(Std. on DX2/50 Models)	
Expansion Slots	3 ISA	3 ISA	10 ISA
Standard HDrive	60/80-MB	0/80/120/200-MB	0/120/340/535-MB
Drive Bays	3	3	12
Starting Price	\$995*	\$1,495	\$2,295
New 50-MHz 486DX2	\$2,495	\$2,495	\$3,595

Standard on all Models: Integrated Intel® i486 Super VGA (800 x 600) upgradeable to 1-MB (1024 x 768), Serial (2) Parallel Mouse Ports and IDE hard drive interface. 3.5" floppy drive. *Price includes hard drive.

For the start of a great, more open, relationship. Visit your favorite ALR reseller, or call:

1-800-444-4ALR

ALR
 Advanced Logic Research, Inc.

9401 Jeronimo
 Irvine, CA 92718
 TEL: (714) 581-6770
 FAX: (714) 581-9240

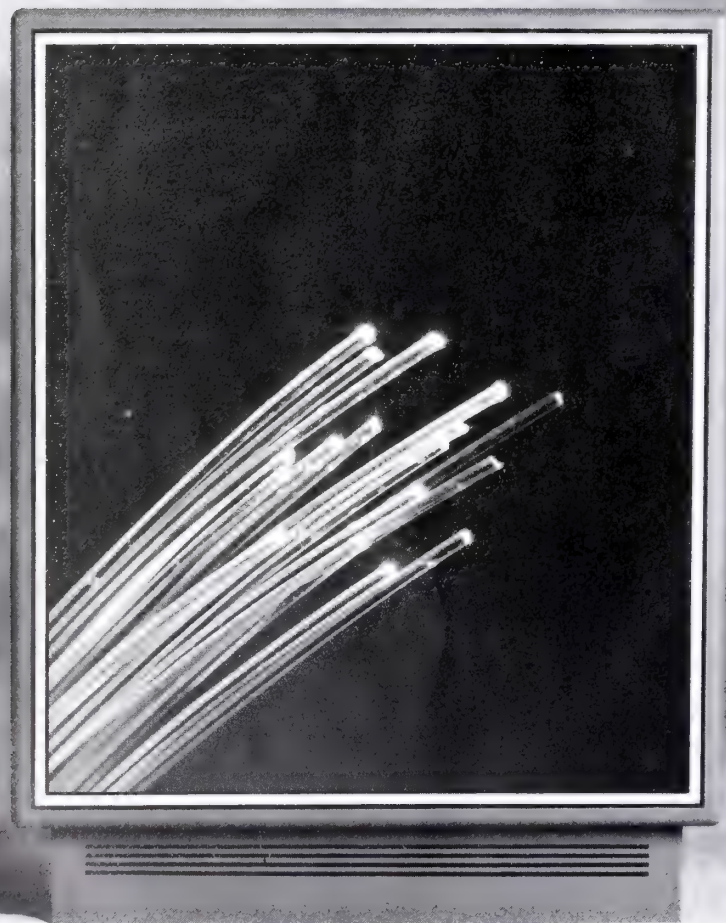
Available at these nationwide locations:

ComputerLand Connecting Point CENTRE COMPUTER CENTERS

IBM BUSINESSLAND TBC ALR Power Partner Resellers

Prices and configurations subject to change without notice. Pricing based on U.S. dollars. Systems shown with optional monitors. Some products shown with optional equipment. Contact ALR or your local ALR reseller for complete pricing.
 * (IBM® Model 95 (25-MHz i486DX) rated at 8.5 MIPS) Source: Power Meter™ V.1.7 The Data Base Group, Inc. Upland, CA. ALR is a registered trademark of Advanced Logic Research, Inc. Intel Inside Logo is a trademark of Intel Corporation. All other words and product names are trademarks or registered trademarks of their respective owners. © 1992 Advanced Logic Research, Inc.

THIS ISN'T THE FIBER OF TELECOMMUNICATIONS.



THIS IS.

*Keith Lee
Customer Service
Analyst
Chicago, IL*



*Devaux
Maintenance Engineer
Tampa City, FL*

*Penny Waters
Installer/Repairperson
Las Vegas, NV*

As a leader in telecommunications and the use of fiber optics, Centel has succeeded by not only discovering the power of technology, but by remembering how

real communication happens: people to people.

Which ultimately means that

the quality of your communication depends on the quality of the people behind it. And nobody in telephone or cellular makes that connection better than Centel.

CENTEL
WHERE PEOPLE CONNECT
TELEPHONE • CELLULAR

EUROPE'S NEW POPULISM COULD KILL UNIFICATION

This is the summer of Europe's discontent. It now appears that Danish voters' June 2 rejection of the Maastricht treaty lifted the lid on widespread grass-roots unease over European unification. Opposition to the treaty shows signs of strengthening in several countries, including Germany and France. The uprising is comparable to the anti-Establishment backlash that is propelling Ross Perot's Presidential campaign in the U.S. The politicians "got ahead of people's hearts and minds," says Deutsche Bank board member Ellen R. Schneider-Lenné. "It's right for government to lead, but it should listen to what the people are saying."

European Community President Jacques Delors and Europe's political leaders now face the intense questioning that they dodged before they cut the Maastricht deal last December. If Europe's leadership does not do a better job of selling the treaty, which calls for economic union by 1999, the EC's ambitious goals could be scaled back. Some observers, such as Etienne Davignon, chairman of Société Générale de Belgique, think the EC is likely to be no more than a huge free-trade zone for many years, with perhaps a handful of countries unifying their economies.

For now, EC leaders are scrambling to keep the treaty process on track and avoid a collision course with voters worried about losing control to an all-powerful Brussels. In a June 10 speech before the European Parliament, Delors insisted that Brussels was not out to usurp the powers of national governments. Britain, which takes over the EC presidency on July 1, wants the community to adopt language clipping Brussels' wings. And on June 9, seven of the EC's 12 finance ministers rejected EC President Delors' proposed half-trillion-dollar, five-year budget as overly expensive.

BLESSED CHEESES. The popular review that Maastricht now faces could turn into a politician's nightmare. Already this year, elections have dealt established parties in Belgium, France, Germany, and Italy major setbacks. Maastricht makes a perfect target for those who worry about local identities being submerged in a united Europe. For instance, French consumers fear that food-safety rules dreamed up by Brussels bureaucrats might deprive them of Roquefort and other favorite cheeses. And in culturally divided Belgium, Flemish voters worry that rules granting all legal EC residents the right to vote could tip the balance of power to the French-speaking community. Fear of ceding control to Brussels over sensitive issues such as immigration policy and the environment is already giving fringe groups mainstream appeal. France's National Front chalked up substantial political gains earlier this year on a hardline xenophobic platform. "There's a kind

of ethnocentric virus going around," says Jorvis Voorhoeve, director of the Netherlands Institute for International Affairs.

Maastricht's next big test comes in Ireland on June 18. Irish had been considered a cinch to ratify the treaty and receive about \$6 billion in EC transfer payments, but now the outcome is very much in doubt. The reason: Both pro-choice and anti-abortion camps have mobilized over concerns that Brussels will have the ultimate say over Ireland's constitutional ban on abortion. A second referendum rebuff to European unity from Ireland could deal Maastricht a death blow.

TAKING FLAK. The treaty's troubles are mounting even in the New Europe's core countries. German Chancellor Helmut Kohl's plans to push ratification through Parliament could well stumble over the sovereignty issues raised by the Danish Polls show that three out of four Germans do not want to give up their stable mark for a fuzzy Eurocurrency later this decade.

Kohl's partner in European building, French President Francois Mitterrand, faces even greater political pressure. The unpopular Mitterrand shrewdly abandoned plans to have on the French legislature ratify Maastricht and threw open the Europe question to a referendum likely to take place in September. While a *oui* vote in France would restore Maastricht's momentum, a *non* would stop the Europe train on its tracks. While right-wing fringe groups have been getting most of the ink in France, more buttoned-down Establishment figures are speaking out as well. Peugeot Chairman Jacques Calvet has broken with pro-Maastricht industrialists, saying the federalist process threatens Europe's economic well-being. Calvet says he might run for president next year. Gaullist party leader Jacques Chirac is known to be unenthusiastic about Maastricht.

Europe's weak economic climate will only feed the slow forces. Business leaders still back monetary union as the fastest path to dramatically lower borrowing costs. But after a spurt of investment in new plants to prepare for the coming single market, manufacturers such as Daimler Benz and France's Groupe Usinor Sacilor, Europe's biggest steelmaker, are now mainly cranking out restructuring and layoff announcements that do not endear unification to voters.

What may eventually win voters over is the single market that kicks in Jan. 1, when the process of ratifying Maastricht is supposed to be concluded. Over time, the benefits to consumers may ease the fears of centralization and make the logic of monetary and political union clear. But that could take years.

By Bill Javetski in Paris with William Glasgall in Frankfurt, Richard A. Melcher in Lisbon, and Patrick Oster in Brussels





A promise two wheels will replace three, once your feet can reach the pedals.

A promise that you won't be the only one wearing galoshes in the rain.

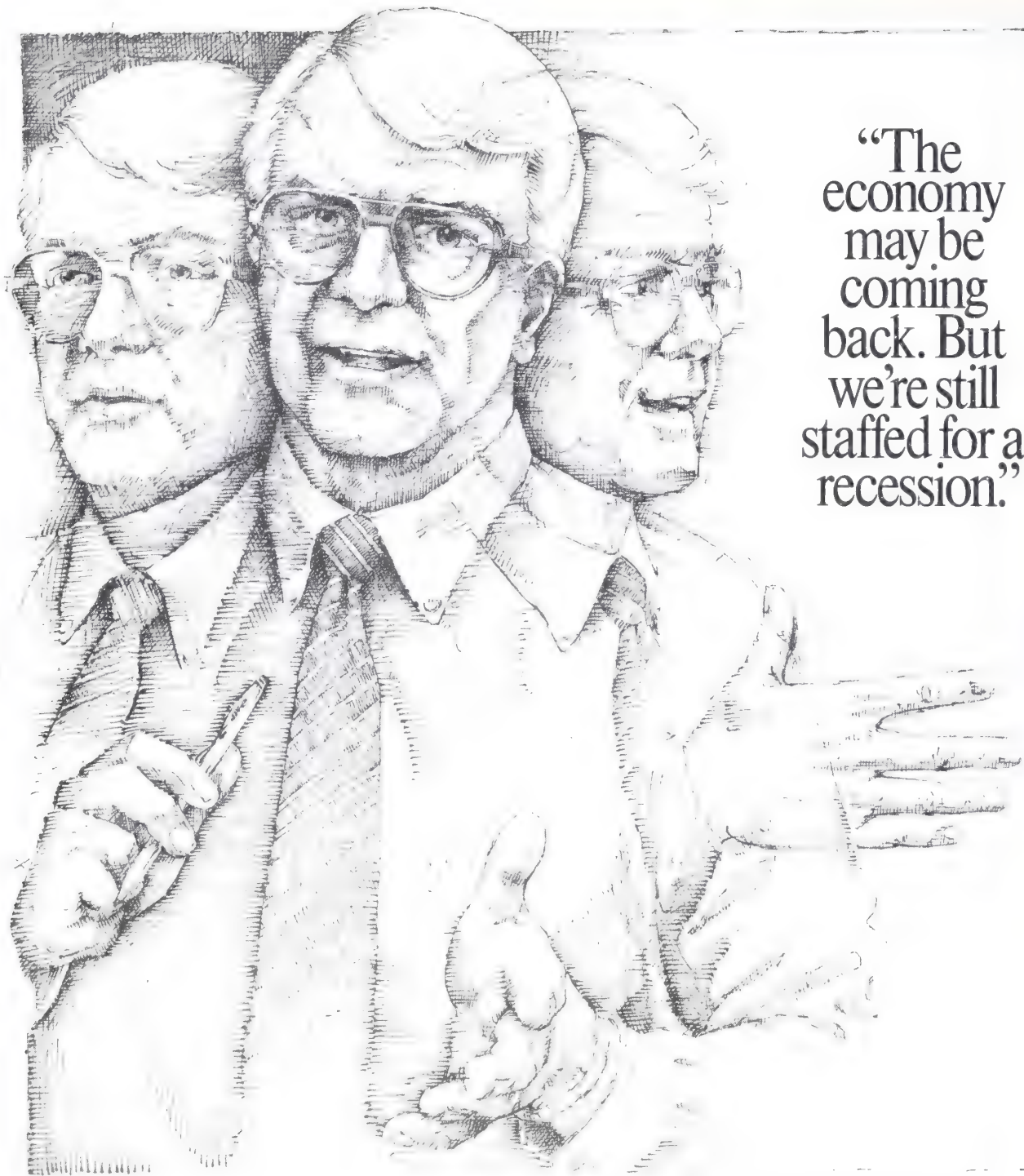
A promise you'll feel as safe tomorrow as you do today.

Nothing binds us one to the other like a promise kept. Nothing divides us like a promise broken. At MassMutual we believe in keeping our promises. That way all the families and businesses that rely on us can keep theirs.



MassMutual[®]

We help you keep your promises.[™]



“The economy may be coming back. But we’re still staffed for a recession.”

“Hiring more people may not be the answer.”

No one knows whether we’re on the verge of a major recovery—or a short-term comeback. But many companies will choose to gamble. In their rush to take advantage of rising short-term demand, they’ll add long-term staff they don’t need—and incur expenses they simply can’t afford. There’s a more prudent way. With



Guy Millner
CEO

Norrell *flexible staffing*, you can quickly change the size of your workforce as demand changes. If you like, Norrell can even train and manage the workers for you. Just one example of how we’re helping companies find smarter ways to get things done. Find out how you can grow more efficiently. For a free staffing consultation, call your local Norrell office today.

Norrell®

Smarter Ways To Get Things Done.™

LOW-INCOME HOUSING: IS THERE A BETTER WAY?

The debate over tax credits for corporate backers heats up



When corporate investors talk about making a financial killing, they don't usually mean bringing money into public housing. But companies, including Walt Disney, Viacom, and Eli Lilly, have found that investing in housing for the poor can produce rich returns—thanks to the low-income housing tax credit created by the Reform Act of 1986. It's a classic case going well by doing good: Companies in low-income housing partnerships help the needy and, in the process, receive 20% annual yields.

But the popular credit may be as endangered as rising property values: It's due to expire on June 30. Backers of its extension argue that the \$3 billion program provides the only substantial pool of money available for building or renovating low-income housing (chart). Critics wonder whether tax breaks are the best way to create affordable housing. A recent Congressional Budget Office study even questions whether

the credit boosts the overall housing supply, suggesting that the \$4.5 billion-a-year federal rent-voucher and certificate programs are far more cost-effective.

One newly opened residence, the Ashland Apartments in northern Chicago, is a typical example of how these partnerships work. In December, 1990, the four-story structure was one of several empty, boarded-up buildings in an economically depressed neighborhood. Working with People's Housing Inc., a local community development group, the National Equity Fund Inc. (NEF), a major syndicator, invested \$1.2 million in the building, one-third of a budget that included financing from the National

Bank of Chicago and the Chicago Housing Dept. For Phyllis Garrard and her son Aaron, 12, Ashland has been a welcome improvement from their old apartment building, which was damaged in a fire.

Though hardly lavish, Ashland has already improved the street. "There used to be a lot of drug dealers and gangs around the building," says Timothy Dixon, who lives with his family in one of the 51 apartments. "Now there's nothing like that anymore."

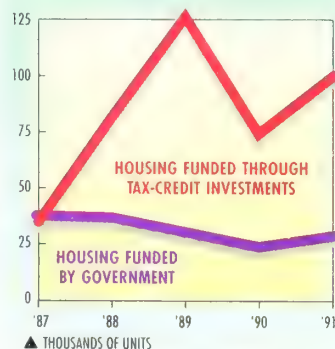
TOUCH OF CLASS. Since 1986, tax-credit financing has built or renovated more than 400,000 housing units, in some cases with a touch of class the government by itself would never match. In Washington, for example, the NEF is financing a \$3.6 million renovation of the historic Whitelaw Hotel, where Duke Ellington and Thurgood Marshall often stayed in the 1920s and 1930s. The hotel, which for a decade had been a vacant eyesore, will consist of 35 new apartments, mostly with two and three bedrooms.

The credit helps fill a vacuum created by the Reagan and Bush Administrations, which have slashed funds for public housing 80% since 1980. Since the late 1980s, the White House has focused on encouraging tenants to manage and eventually buy their homes with federal grants. But there's still an urgent need for affordable housing.

Credit advocates, who include such heavyweights as Senate Majority Leader George Mitchell (D-Me.), Senator John C. Danforth (R-Mo.), and House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.), argue that it should be part of any urban-aid package Washington fashions in response to the riots in Los Angeles. "It's a very good program," says David D. Pagan, administrator for Los Sures, a Brooklyn (N.Y.) community development corporation that is using the credit to build 200 units. "It's a boost to local economies."

Critics charge, however, that it's mostly a boost to the companies that invest in the partnerships. The NEF estimates that a corporation investing \$2 million in a 15-year partnership would get to deduct \$2.44 million in credits and net \$673,000 in savings from depreciation on its federal tax bill—amounting to an average annual return of 19.6% over the lifetime of the partnership. "It's a lucrative giveaway," gripes an aide to Representative Wilis D. Gradison Jr. (R-

FUNDING PUBLIC HOUSING



HOW TO CHOOSE A TAX-FREE PORTFOLIO



STEP 1: CONSIDER YIELD POTENTIAL. In a

bond fund, other things being equal, lower costs mean higher yields. The Vanguard Municipal Bond Fund has virtually the lowest operating costs in the industry: 0.25 of 1%*—with no commissions, no fees. Minimum investment: \$3,000.

STEP 2: CHOOSE MATURITY LEVEL.

The longer the average maturity length of the bonds, the higher the market volatility—and potential returns.

Vanguard offers you two short-term portfolios for lowest risk; two intermediate-term portfolios for higher yields with some volatility; three long-term portfolios for highest yield potential.

STEP 3: CALL 1-800-523-0889 for our free Tax-Free Investing Kit.

A portion of income may be subject to the Federal alternative minimum tax.

*Lipper Directors' Analytical Data.

Residents of CA, NY, NJ, OH, PA: Please ask about our State Tax-Free Funds.

Please send me the free Vanguard Tax-Free Investing Information Kit.

I understand it contains a prospectus with more complete information on the Vanguard Municipal Bond Fund, including advisory fees, distribution charges and other expenses. I will read it carefully before I invest or send money.

Vanguard Municipal Bond Fund
P.O. Box 2800
Valley Forge, Pennsylvania 19482

Name

Address

City

State Zip

BWG2-174

THE Vanguard GROUP
OF INVESTMENT COMPANIES

Money Making Discovery For Sales Executives!

Imagine finding a hidden universe with thousands of emerging private firms where last year one in seven expanded employment by over 25%, and the 5,000 fastest growing grew by an average of 23% ... creating 502,000 new jobs and the need for almost every kind of business product or service - everything from office equipment to disability insurance to real estate.

A little known sales tool that tracks these companies is making money for sales executives who use it. Called the CORPTECH DIRECTORY, it's the only resource available that uncovers America's emerging sector of technology manufacturers. Think of it! While most of the economy is hurting, *these companies are growing*. CorpTech gives you their names, geographic location, growth rates for each company, plus names, titles, and responsibilities of their 111,000 key executives.

"Great investment ... made money by quickly and easily identifying customers for specific products," Mike Mueller, Manager, Toshiba.

Free fact kit shows 20 money-making ways this sales tool can revitalize *your* selling efforts. Call 1-800-333-8036 or mail the card address to CorpTech, Dept BSW, 100 Red Street, Woburn, MA 01801.

When
you give blood
you give
another
birthday,
another laugh,
another hug,
another
chance.



American Red Cross

Please give blood.



Social Issues

Ohio), the ranking member of the House Budget Committee.

In April, a CBO report questioned the premise that the tax credit acts as a spur to housing: The number of privately funded low-income units overall barely rose when tax breaks were enacted in the 1960s and 1970s. Conclusion: The credit often subsidizes housing that would otherwise have been provided through private efforts—either “hand-me-down” residences vacated by the middle class or projects built by low-income housing professionals.

A case in point: developer Jack Y. Matthews, general partner of Washington-based W&M Associates L.P. He got a \$250,000 tax credit for four austere buildings he finished two years ago in a blighted Washington neighborhood—but “I was going to do the job anyway,” he says. The buildings are hard to manage, “but I made a profit”—thanks to various federal and municipal rent subsidies.

VOUCHER BACKERS. Questions about the credit have spurred critics to demand a look at other options. The CBO, for instance, calculates that housing credits are almost twice as costly as rent vouchers, which provide families with a coupon for the difference between the fair-market rent and 30% of the family's income. The credit is more expensive partly because it encourages construction while vouchers are used in existing housing.

But the credit also involves some inefficiencies. According to the CBO, 20¢ of every tax-credit dollar pays for syndicator costs rather than for low-income units. In addition, only 13% of the units subsidized by credits had three or more bedrooms, making the majority inadequate for families. Developers often prefer to do projects for singles and the elderly because, as one syndicator delicately put it, “they put less wear and tear on the buildings.”

“Is this the best way to invest in low-income housing? Probably not,” says Michael A. Stegman, a city planning professor at the University of North Carolina at Chapel Hill. Stegman doesn't advocate abolishing the credit. But he feels it should be augmented with federal rent subsidies and block-grant programs for construction of new low-income housing. Such direct funding would cut down on costs, particularly the sizable fees that go for legal staffs and syndicators, he argues.

Unfortunately, a deficit-weary Congress isn't likely to authorize direct handouts. The credit has been extended before, and probably will be again—and with it, the big corporate tax benefits. Tax credits may not be the best way to provide housing for the poor. But in Washington, there's often a gap between the best way and the easy way.

By Christina Del Valle in Washington
with David Greising in Chicago

BUDGET AND AMERICAN EXPRESS COMBINE FORCES TO CUT TRAVEL COSTS.

Everybody has to cut travel costs these days. Some companies just help you do it better than others.

Every time you use the American Express® Card at Budget, you can choose from three exclusive offers like a low rate on a luxurious Lincoln. Or 10% off your next rental. Or a double upgrade. Make your next trip smarter than ever by joining forces with Budget and American Express.

To receive these offers, here are a few details you will want to know. These offers are good between 4/1/92 and 6/30/92 at participating Budget locations, when you charge your rental with the American Express Card. You will need to mention offer at time of reservation and at time of

THREE SMART CHOICES.

\$39.99
Per Day.

Lincoln.

Unlimited Mileage.

Optional LDW \$12.99
or less where available.

10% OFF

On compact through
full-size cars.
2 or more rental days.

**DOUBLE
UPGRADE.**

When you reserve an
intermediate-size car,
receive a double upgrade
to a full-size.

rental. Three-day advance reservations are required. Double upgrade subject to availability of larger car at time of rental. Refueling service, taxes and optional items are extra. Offers not available with any other discount or promotion. 10% off not available with CorpRate® or government rates. Blackout periods, surcharges for extra drivers and drivers under 25, and other normal rental requirements will apply. Car must be returned to renting location. Lincoln rate may be higher in New York and other major metropolitan areas. Only one offer per rental. For information and reservations, contact your travel consultant or call Budget at 800-527-0700 and ask for the American Express promotional offers.



THE SMART MONEY IS ON BUDGET.™

Why are so many Lotus 1-2-3 users switching to Microsoft Excel?





Microsoft Excel, the spreadsheet hundreds of thousands of 1-2-3 users are switching to.

Why? Because they've discovered that new Microsoft Excel 4.0 for Windows™ is the ultimate refinement of a powerful, easy-to-use spreadsheet. Use it, and you too could be getting your routine spreadsheet tasks (not to mention more amazing number-crunching feats) done one faster. And more easily.

We're talking about one-step just-about-everything. For example, Autosum™ instantly totals rows or columns of figures with just a click-lick of your mouse.

Or take AutoFormat: it lets you apply one of 14 professionally designed formats to your worksheet with another click of your mouse.

They're both on your customizable Toolbar, which also has helpful things like a Spelling Checker and instant charting.



Using your 1-2-3 files, your own macros and familiar commands in Microsoft Excel 4.0 for Windows is no problem.

New Microsoft Excel 4.0 for Windows just received InfoWorld's highest spreadsheet rating ever, a 9.3. Why not try it and see what everybody's talking about?

And then there are learning tools like Wizards, which are step-by-step guides of various features.

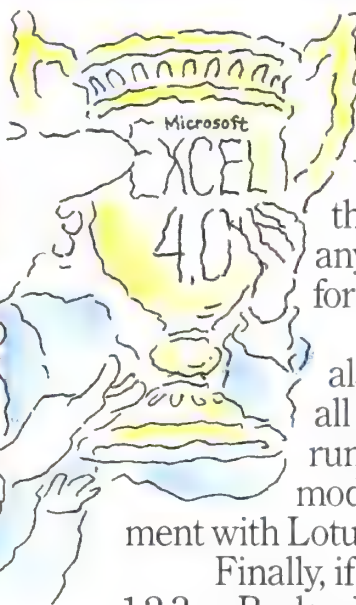
And Scenario Manager, an analysis tool that lets

you easily create and save multiple "what if" scenarios, then instantly produce nice-looking summary reports.

And a lot more – far too much to cover here. In short, spreadsheet tasks, both routine and complex, are easier than you ever thought possible.

"Okay," you say, "but how easy is it to switch?"

Well, consider this: Microsoft Excel lets you learn using what you already know. With Help for Lotus 1-2-3 users, you can type in your familiar 1-2-3 commands,



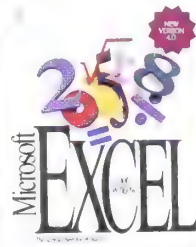
and Microsoft Excel shows you the corresponding command. (Which, by the way, is something you won't see in any other spreadsheet for Windows.)

Microsoft Excel also reads and writes all your 1-2-3 files, and runs your macros – unmodified. So your investment with Lotus is safe.

Finally, if you're using Lotus 1-2-3 or Borland Quattro Pro, you can switch to Microsoft Excel 4.0 for Windows for \$129*. There's even a 90-day money-back guarantee.**

But see all this for yourself. Ask for a demo of Microsoft Excel 4.0 for Windows at your local software reseller. Or call us at (800) 323-3577, Dept. HB3, to find out more or to order your copy.

And join the multitude of 1-2-3 users who've moved to the best spreadsheet made for Windows: new Microsoft Excel 4.0.



The spreadsheet for Windows.

Microsoft
Making it easier



CEO PUGH'S STRATEGY HAS BEEN TO PITCH DIFFERENT BRANDS AT SPECIFIC RETAILERS

AFTER CAREFUL RE-TAILORING, VF IS LOOKING SMART

It listened to customers—and patched up jeans and lingerie sales

At an April meeting of top VF Corp. executives, the president of the clothing company's Wrangler unit ended his presentation by flashing a chart showing two overlaid curves. The upward-moving line illustrated Wrangler's healthy sales growth, explained Mackey J. McDonald, while the downward line showed the declining number of phone calls from corporate headquarters. Even Chief Executive Lawrence R. Pugh had to laugh.

VF division presidents used to hear from HQ more often than they liked. Despite owning such well-known brands as Wrangler and Lee jeans, Jantzen sportswear, and Vanity Fair lingerie (chart), VF missed some important shifts in fashion and spent the end of the 1980s in a slump. Two years ago, profits plunged 1%, to \$81.1 million. But now, things are looking up. Revenues last year rose to \$3 billion, while net income nearly doubled, to \$161 million. This year, the Issiessing (Pa.) company is moving at an even faster clip, with first-quarter sales up 33% and net income up 53%.

For Pugh, 58, it's the payoff for three years of careful re-tailoring. He and his managers have focused the once-complacent company on figuring out what shoppers want and on helping retailers sell its products more aggressively. He also has been busily adding to VF's core lines. In the past year and a half, Pugh has paid \$134 million for four acquisitions: Health-tex children's wear, Barbi-

zon lingerie, Green Cotton Environmental clothing made from organically grown fibers, and Valero Group, a Paris lingerie maker.

VF hardly has its lucrative markets to itself, though. In lingerie, it faces even stronger competition from Warnaco Inc. and giant Sara Lee Corp., with such divisions as Hanes, Bali, and L'eggs. In jeans, of course, there is no more formidable competitor than Levi Strauss & Co., with 1991 revenues of \$4.9 billion and an imposing 21% U.S. market share.

For years, VF essentially let its jeans and lingerie sell themselves. But then the spreading baby boom generation started doffing its jeans for baggier and more colorful fare, such as Levi's huge successful Dockers line. VF's powerhouse brand names began to fade. "VF remained profitable, but the product was a mess," recalls Pugh, who had been president of luggage maker Samsonite Co. before joining VF in 1980.

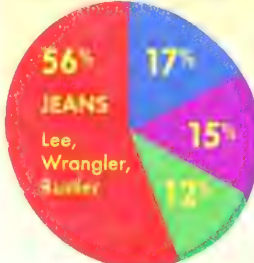
PENNEY PINCHING. In 1989, he went to work on the turnaround. He called for frequent market research, allocated \$5 million for state-of-the-art order-tracking equipment, and urged brand managers to choose their retail channels carefully—a break from its scattershot approach of the past. At Lee, suffering the most of any VF division, Pugh brought in a new management team, led by former The Limited Inc. executive Frederick Rowan II. They rewrote the unit's mission statement to reflect a new consumer-driven emphasis, started holding customer focus groups, and sent out teams of interviewers to shopping malls to measure new-product successes. Lee's market share, which hit a low of 10% in 1990, is back up to almost 12%—only a point shy of its 1985 peak.

Instead of trying to pitch their brands everywhere, Pugh's managers now assign different brand names precisely at specific retailers. In jeans, consumers can buy the tony Girbaud line in high-priced department stores, while they look to mass marketers for Lee. Wrangler and Rustler, VF's lowest-priced jeans, are pitched at discount stores. In lingerie, VF's Eileen West line is aimed at upscale department stores, while Vanity Fair goes to midrange shops and the Vassarette brand to discount stores.

Besides making sense for consumers, the targeting means retailers are getting much more individual attention from VF. Last fall, Lee opened boutiques in 15 J.C. Penney Co. stores, with the manufacturer taking care of graphic stocking, and even carpeting. Next, Penney will roll out expanded Lee wall and table displays in 800 stores. Says Penney Merchandise Manager James C. Mag-

THE BRANDS BEHIND VF

TOTAL SALES \$3 BILLION*



CASUAL/SPORTSWEAR
Bassett-Walker,
Jantzen,
JanSport

LINGERIE
Vanity Fair,
Vassarette

OTHER
Health-tex,
Red Kap

*For fiscal year ended Jan. 4, 1992

DATA: COMPANY REPORTS

Does your corporate bank open doors or knock on them ?



LTCB opens doors to a world of financial possibilities.

We know what's going on – in your industry and ours. Our influential, independent position in global finance makes us a prime source of information as well as funding for your ventures.

Money isn't everything...especially in finance. Sometimes you need a door-opener, too.



The Long-Term Credit Bank of Japan, Limited

Tokyo, London, Paris, Brussels, Frankfurt, Zurich, Milan, Madrid, Bahrain,
New York, Chicago, Los Angeles, Greenwich, Philadelphia, Toronto,
Atlanta, Dallas, Mexico City, Sao Paulo, Rio de Janeiro,
Hong Kong, Singapore, Seoul, Beijing, Shanghai, Guangzhou, Bangkok,
Kuala Lumpur, Jakarta, Sydney, Melbourne

WHY SETTLE FOR THE LOWEST INTEREST RATES IN 20 YEARS?

100% NO
LOAD

6.69%*
CURRENT
YIELD

T. Rowe Price Adjustable Rate U.S. Government Fund can give you higher yields with low volatility. The Fund invests in adjustable rate mortgage securities (ARMs) backed by the U.S. Government or its agencies for the timely payment of principal and interest.* \$2,500 minimum (\$1,000 for IRAs). 100% no load—no sales charges.

**CALL 24 HOURS FOR CURRENT YIELD AND A FREE REPORT
1-800-541-6592**



Invest With Confidence
T. Rowe Price



3.8% is the total return for seven months since inception 9/30/91 to 4/30/92. This figure is not annualized. It includes changes in principal value, reinvested dividends, and capital gain distributions. Total return represents past performance. The Fund's investment return and principal value will vary, and shares may be worth more or less at redemption than at original purchase. Fund expenses will not exceed 0.40% through June 1993. Without expense cap, yield and total return would have been lower. *Average annualized yield for the 30 days ended 5/24/92. Yield and share price will vary as interest rates change. **The Fund itself is not guaranteed by the U.S. Government or its agencies. Request a prospectus with more complete information, including management fees and other charges and expenses. Read it carefully before you invest or send money.

T. Rowe Price Investment Services, Inc., Distributor, 100 E. Pratt St., Baltimore, MD 21202.

1400+ MUTUAL FUNDS

**THE WHO, WHAT, WHERE,
WHEN, HOW, AND WHY—
FROM BUSINESS WEEK!**

This eagerly-awaited new edition of one of the most popular investment guides ever published gives hundreds of authoritative scoreboards to help you make safe and successful mutual fund investment decisions. You'll find insider information on ...

WHOSE funds are risky • WHAT to do to minimize taxes, maximize profits • WHERE to find the best funds for 401(k)s and IRAs • WHEN tax-free funds are advantageous • HOW to monitor your portfolio and compare fund and market performance • WHY dollar-cost averaging is the long-term answer • AND much more



Cloth, 0-07-035856-7, \$24.95
Paper, 0-07-035857-5, \$14.95

Available at your local bookstore—
or call toll-free 1-800-2-MCGRAW

McGraw-Hill, 11 West 19th Street, New York, NY 10011



ness: "If we need something—maybe we need signs in a different size, or we need them to do a presentation for our regional offices—they do it. No problem."

Meanwhile, focus groups and customer questionnaires have opened VF executives' eyes to some important trends. Consumers complained that Lee jeans were getting too fancy, with fuss touches such as embroidery and stylistic finishes. So, VF returned to such mainstays as its standard five-pocket jeans, the nation's best-selling women's style. It also found that, despite Lee's then-slumping sales, the name still carried a lot of clout. VF began marketing T-shirts and sweat suits featuring the Lee logo. Now, 80% of the output of its Bassett Walker manufacturing arm is devoted to Lee products.

Pugh has shaken up manufacturing and distribution operations with potent new technology. The company is now linked with many of its retailers' computers, which sort out VF sales data from checkout scanners and beam it via satellite direct to VF divisions every night. VF can then replenish stock sometimes in as little as 72 hours. The market-response system also helps VF keep tabs on trends: When the Girbau unit noticed that shorts were selling well way beyond the traditional midsummer season last year, it kept stocking them and sold more, long after rivals ran out. VF gets some 30% of its business from retailers hooked into the system.

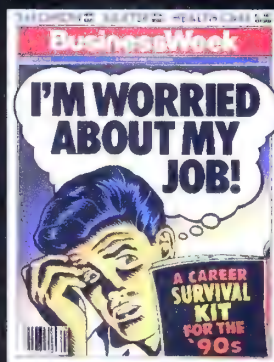
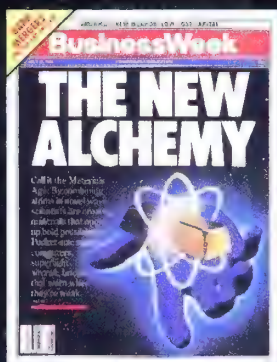
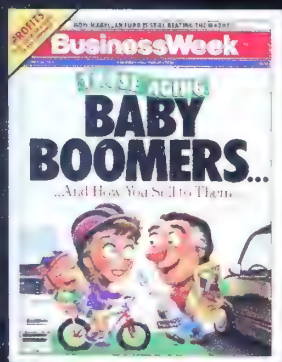
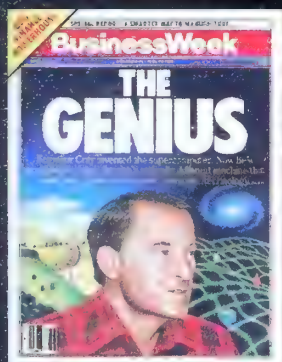
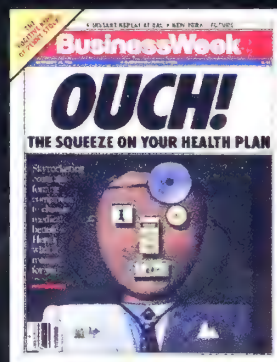
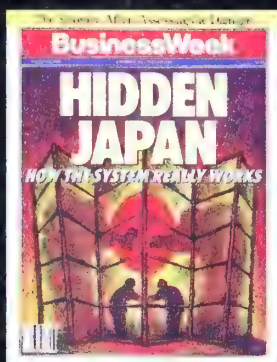
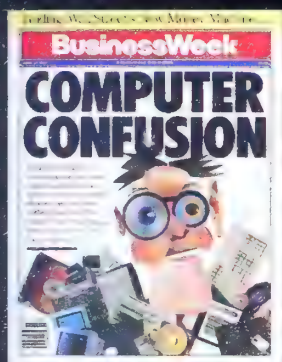
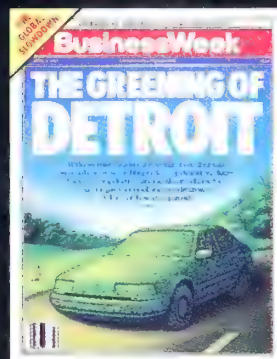
DOCKER KNOCKOFFS. One downside to all the success is that VF managers now look tempting to rivals. The company took a big blow in May, when Rowan quit Lee to become CEO of children's clothier William Carter Co. But Wal Street isn't too concerned: VF's stock has soared to more than 45, nearly four times its 1990 low.

Next, says Chief Financial Officer Gerard G. Johnson, VF wants to become more of an international player. It now gets less than 10% of its revenues overseas, vs. 39% for Levi Strauss. VF still has some snipping and stitching to do on its latest domestic acquisitions, though.

VF managers are repositioning Barbozon and will probably aim its lingerie products more at the low end of the market. The company has dropped Health-tex' bigger sizes of kids' clothes to concentrate on the under-six set where it has been strongest in the past. And it is busy playing catch-up to Levi's Dockers with copycat lines from Wrangler and Lee. "In retrospect, we should have [responded to Dockers] earlier," concedes Pugh. Now that VF is paying more attention to its customers, maybe it won't make that mistake next time.

By Janet Bamford in Wyomissing, Pa.

The Fine Art of Reporting Business News



BusinessWeek
PROFIT BY IT

FOOD LION: STILL STALKING IN TOUGH TIMES

It's risking a big expansion despite recent disappointing earnings

Tom E. Smith, chief executive of Food Lion Inc., is counting Pop-Tarts. Poring over a three-inch-thick computer printout, he spots some disturbing news. Ever since the grocery chain's 900-plus stores gave in to consumer demand and started carrying private-label breakfast pastry six weeks earlier, the higher-margin Pop-Tarts

But Smith, 51, is unbowed. He is charging ahead with a risky and ambitious plan to double revenues by 1997. Last year, Food Lion, based in Salisbury, N. C., blitzed the Dallas-Fort Worth area with a new distribution center and 41 of its no-frills stores. Arkansas and Louisiana are its next big targets in that region. A new Pennsylvania distribution



SMITH: MANAGING A RAFT OF NEW STORES, MANY OUTSIDE THE SOUTHEAST, WILL BE A BIG TEST

brand has lost 25% of its market share. Smith sees a lingering effect of the recession in the numbers: "People are still willing to trade down to cheaper brands, and that has been rough on the industry," he says.

Singing the Pop-Tart blues is something new for Smith. For the past six years, Food Lion has been among the supermarket industry's fastest-growing players, zooming from \$2.4 billion in 1986 revenues to \$6.4 billion in 1991. Earnings more than tripled over the same period, to \$205 million last year. But suddenly, frugal consumers, low inflation, and rough competition are catching up. The first quarter's profit increase of 13%, to \$49.6 million, was far below analysts' expectations. Sales in the first quarter open a year or more gained only 1%. The company's stock has fallen by a third since December, to around 12.

center should open the door to that state and Maryland. All told, Smith aims to open 125 new stores this year, bringing the total well past 1,000 (chart).

Smith, an avid hunter who decorates his office with big-game trophies, argues there's no other way to keep earnings growth in double digits. With low inflation holding grocery prices down, he may be right. But unless the economy picks up soon, he could discover it's a jungle out there. Managing his new stores, many of them far from his Southeast base, will be a huge test.

In addition, real estate developers' woes have produced a shortage of the new buildings Food Lion demands. So, the company has started to build and own more of them itself. Real estate development helped push up long-term debt from 27% of capital to 35% last year. It will soon go even higher: Food

Lion plans to own as many as 90 of the stores it is opening this year. Smith insists that owning stores costs little more than leasing. He intends to start selling and leasing back the new stores in 1992 when he hopes the real estate market will have rebounded.

Whether he owns or leases, he'll still have to contend with the competition moving in on Food Lion's low-price niche. Winn-Dixie Stores Inc. just announced across-the-board price cuts. But Winn-Dixie will keep the high-cost services such as flower shops and seafood counters that Food Lion stores lack. General merchandisers such as Wal-Mart Stores, drug chains, and warehouse clubs are also slashing prices on brand-name grocery items. Food Lion argues that it has the best prices day after day and says consumers recognize that. In Dallas, for instance, it has captured 4% of the market in less than a year, forcing established chains such as Toys 'R Us, Thumb Food Stores Inc. and Kroger Co. to respond with costly promotions.

LABOR PAINS. Food Lion's prices are indeed low—and its profit margins are high. The secret is centralized distribution, buying, and pricing. Unlike most chains, which hire regional buyers, Food Lion purchases merchandise for all stores from headquarters, getting huge volume discounts. The orders are then shipped to one of Food Lion's nine distribution centers, to be delivered by company trucks to each of the chain's stores. The system keeps Food Lion's

operating expenses down to about 13% of sales, compared with the industry average of 19%. The company boasts net profit margins of 3%, far above the 1% industry average.

Some claim that questionable labor practices help margins as well. The Labor Dept. is investigating a complaint from the United Food & Commercial Workers International Union and more than 200 former and current employees charging Food Lion with wage and hour violations. Smith denies the charges, saying the union is using them as a ploy to organize Food Lion stores.

Since this year's disappointing first quarter, most analysts have revised their 1992 profit estimates downward. Many have removed their "buy" signal for investors. "I'm wondering what Smith can do about the slow growth in the industry," says Lee D. Wilder, an analyst with Robinson-Humphrey Co. "How can he boost [same-store] sales? In a time of cut-rate Pop Tarts, that's a tough question for Smith to answer.

By Walecia Konrad in Salisbury, N.C.

We're AMBAC.

OUR COMMITMENT TO AMERICA STARTS HERE.

And we back the bonds that build the schools, the libraries and even the city halls in towns and cities throughout America. The fact is, more than one third of all the insured general obligation municipal bonds issued during the past ten years have been insured by AMBAC. But, then, you'd expect that kind of leadership from the people who founded the municipal bond insurance industry.

At AMBAC, we're beginning our third decade of commitment to America. Which means helping secure our country's future by assisting in the rebuilding of the physical systems that support basic public services.

We're also strongly committed to the municipal bond industry. To the investor as well as the issuer.

Because while AMBAC's commitment starts with America's towns and cities, it doesn't end there.



AMBAC

AMBAC Indemnity Corporation
One State Street Plaza, New York, NY 10004
(212) 668-0340

ategy was Macy's investment in SABRE Information Systems, a computer system derated had created for its own stores ars before. He also developed "Buyer-anner-Store," a more efficient method of ying and distributing goods.

But Ullman couldn't fix Macy's all by nself. While Finkelstein continued to ke rosy predictions about the company's ospects, his board was getting impatient. rces close to the board say they had given Finkelstein's legendary ego in the ly stages of the LBO. They also over- ked his two sons and other relatives on payroll. But as Macy's unraveled, CBS . Chairman Laurence A. Tisch, and oth- board members who had significant eq- y stakes in Macy's, increasingly turned Ullman for strategic advice—which ued Finkelstein. Says one board adviser: an understand why Finkelstein would in to feel threatened by Mike."

Finkelstein declined to be interviewed this article but through a Macy's kesman said: "It would be inappropriate to discuss these kinds of subjects. Different people have their own agendas in regard." Ullman denies that his relationship with Finkelstein began to sour. t me make it clear: I felt that I did and ave an excellent relationship with Ed," says. Some close to Ullman, however, r't so sure. Says Jack Miller, Ullman's nd and former boss at Sanger Harris: ink there was some tension."

IOUS CONTRACT. Ullman forced the d's hand late last year, when he re- ed a lucrative offer from Dayton Hud- Corp. to join the Minneapolis-based r- as vice-chairman. Neither Ullman nor ton Hudson will acknowledge the of- but sources close to him confirm it. In onse, the board named Ullman chief ating officer of Macy's. It also gave this curious contract: a guaranteed rance package equal to three times his nt salary if he was not made CEO in vent Finkelstein left.

Finkelstein was clearly irritated by the l's confidence in Ullman's ability to re- him. In a memo to his employees dat- ar. 5, 1992, he wrote: "If I were to be e incapacitated, it would be my mndation to the board that Mark dler] be named chief executive offi- Finkelstein resigned on Apr. 25.

at his absence will mean for Macy's handising strategy is unclear. One When the chain's fashion director, El- altzman, left in April, she wasn't re- d, leading to speculation that Macy's lay down its fashion image. Ullman's priority is probably just to stop the ing—Macy's has been steadily losing y since it filed Chapter 11, and key ex- es have been fleeing. So far, Ullman roven adept at moving to the top of ing retailer. Making it a healthy one e his crucible.

By Laura Zinn in New York

FIDELITY EQUITY-INCOME II

America's Top Performing Equity Income Fund

Fidelity Equity-Income II Fund was ranked the top equity income fund for the year ended March 31, 1992.¹

This **no-load** Fund purchases stocks that offer the potential for current income and capital appreciation. By investing in income-producing stocks as well as bonds and other fixed-income securities, the Fund is managed to moderate the effects of market fluctuations while remaining poised for long-term growth. Remember that greater returns can also mean greater risks and investors should realize that the Fund's share price and return will fluctuate.

Transfer Your IRA to Fidelity. Call today for a Fidelity IRA Fact Kit and ask for your free copy of Fidelity's *Common Sense Guide to Planning for Retirement*.

Visit a Fidelity Investor Center or Call 24 hours

1-800-544-8888



Call for a current Fund prospectus with more information including management fees and expenses. Read it carefully before you invest or send money. ¹According to Lipper Analytical Services, Equity-Income II ranked #1 out of 68 equity income funds for the one-year period ended 3/31/92. *Total returns are historical and include change in share price and reinvestment of dividends and capital gains. Share price, yield, and return will vary and you may have a gain or loss when you sell your shares. Past performance is no guarantee of future results. Fidelity Distributors Corporation.

2r

CODE: BW/EII/062292

**Average Annual
Total Returns* as
of March 31, 1992**

30.38%
1 Year

34.84%
Life of Fund
8/21/90-3/31/92



...together we can save lives.



HAVE YOU EVER
THOUGHT LIFE
COULD USE A
WAKE-UP CALL?

HAVE YOU
DRIVEN
A FORD
LATELY?

**THE 24-VALVE, 220 HORSEPOWER
FORD TAURUS SHO.**

It's a wake-up call in a world of sleepy sedans. The 24-valve, 220 horsepower shot of adrenalin called Ford Taurus SHO.

When its Super High Output V-6 comes alive, a special sport-tuned suspension and anti-lock brakes sync up with a *new, improved five-speed shifter* to create a responsive and invigorating performance.

The SHO's new dash flows into the doors in a seemingly seamless manner. SHO also has performance gauges and articulated sport seats with optional leather trim.

Outside, ground effects enhance a new shape to create a dramatic look. One to be noticed both coming and going.

NEWS ABOUT SAFETY.

All it takes is some rapid eye movement around the cockpit to see what's new. For safety's sake, there's a *newly available front passenger-side air bag*. A driver-side air bag comes standard. Both supplemental restraint systems should be used with your safety belt.

Take your daily routine down a new route. The 1992 Ford Taurus SHO.

**FORD. THE BEST-BUILT AMERICAN
CARS...ELEVEN YEARS RUNNING.**

Based on an average of consumer-reported problems in a series of surveys of all Ford and competitive '81-'91 models designed and built in North America.

**NEW TAURUS
SHO**



JAPAN'S NUCLEAR GAMBLE IGNITES A WHITE-HOT DEBATE

It's importing tons of plutonium as it seeks energy self-sufficiency

Eighty-five miles north of Tokyo, in a labyrinth of sealed rooms separated by radiation detectors and security posts, Japanese government researchers in white coveralls and yellow boots experiment with one of the deadliest substances on earth: plutonium. Wearing thick rubber gloves, they reach into acrylic boxes and mix the toxic element with uranium, making black pellets that will burn in nuclear-reactor cores. Here, at the Tokai nuclear research center, squabbles over the wisdom of stockpiling atom-bomb material are irrelevant to engineer Masayuki Iwanaga. "I hope politics doesn't interfere with technology," he says.

That may be a vain hope. In the 21st century, Japan plans to become self-sufficient in electricity—and make its industries even more competitive—by firing up "fast-breeder" reactors that generate more plutonium fuel than they burn. But while the idea sounds good to a country that imports nearly all the oil and uranium it uses to produce 56% of its electrical power, it's fueling a furious debate. Some Japanese question spending what could be \$75 billion on iffy technology. And criticism is rising at home and abroad over a plan to ship in 42 tons of plutonium from Europe, starting in November. "You're introducing bomb material," says Paul L. Leventhal, president of the Nuclear Control Institute in Washington, who dreads what may happen on the 17,000-mile journey. "Should Japan acquire this much plutonium?"

NO WASTE. Japan says yes. By 2010, the government aims to cut oil's share of total electricity from 29% to 10%, while boosting nuclear power from 27% to 40%. Plutonium is the key. Conventional water reactors create some plutonium

as a byproduct of fission, the splitting of atoms to release energy. But these reactors typically run only on uranium, with the plutonium stored as waste. Now, Japan plans to convert 12 of its 42 existing nuclear plants to run on a mixture of uranium and plutonium. At the same time, it will develop fast breeders, which not only burn the urani-

um and transfers heat away from it by means of pipes looped around the vessel. But this piping has many elbows and bends that increase the chance of coolant leakage. A French design minimizes piping by placing the cooling system inside a larger tank, but that makes maintenance hard. The Japanese have come up with a third type that uses less piping and is easier to service. The Monju plant, a \$4.6 billion, 280-megawatt prototype built on this design, is due to fire up next spring in western Japan.

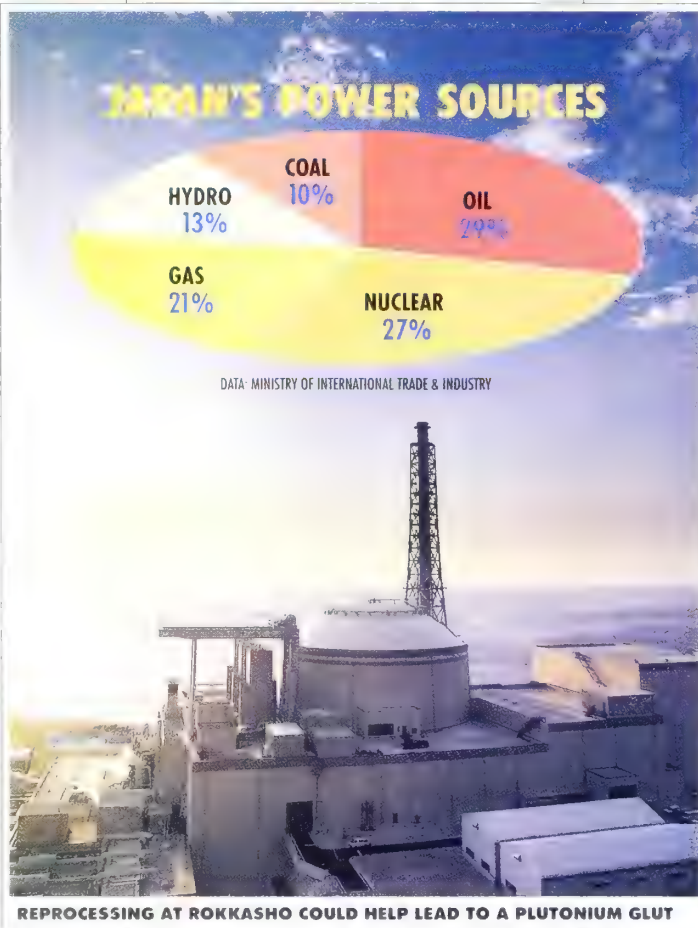
A utility consortium will take over the project and start on a 600-800 megawatt demonstration reactor later this decade. If it proves successful, the commercial units will follow. Neither the government nor the utilities will predict the final tab. But nuclear chemist Jinzaburo Takagi, head of the Tokyo-based Citizens' Nuclear Information Center (CNIC), says it could surpass \$75 billion.

HOT TARGET. This is a major argument against the fast breeder, whose price may be three times that of a conventional nuclear plant. With world uranium supplies dwindling, the trade-off seemed acceptable in the 1970s, when Tokyo shaped its plan. But since then thanks to new discoveries in Canada and Australia and worldwide antinuke sentiment, uranium demand has moderated and prices have plunged. The U.S. funds only modest fast-breeder research. Even in France, where nuclear plants generate 73% of electricity, vs. 22% in the U.S., the fast breeder program is on hold.

The other focus of criticism is the chance of a high seas mishap. Over the next 18 years, before Japan's plants start breeding their own fuel, spent rods from its conventional nuclear units will be reprocessed in Britain and France. The plutonium extracted from them will be sent back aboard the

Pacific Crane, a 7,000-ton, double-hulled nuclear fuel transport. Extra fuel tanks will let it sail nonstop. But since Japan's constitution forbids sending military ships abroad, the Pacific Crane's only protection will be the lightly armed Shikishima, a Coast Guard-like vessel.

To prevent accidents, sensors have been installed to detect and flood fires in the hold. The four-layer lead casks bear



um-plutonium blend but also have such a high degree of fission that they create more plutonium than they use—in essence, burning your fuel and having it, too. Japan plans to have two commercial fast breeders on-line by 2030.

To get there, it will have to solve plenty of problems. An experimental fast breeder designed by the Japanese government circulates sodium coolant into

the plutonium can withstand a fire 800°C for 30 minutes and survive pressures at ocean depths of 10,000 meters. Moreover, satellites will monitor the ship as it plies its secret route. The U.S., which sold Tokyo its uranium and has the right to approve transport plans, has added these safeguards, says Toichi Saita, director of the nuclear fuel division of Japan's Science & Technology Agency. The State Dept. says approval is still pending. In any case, nuke watchers are on edge. On May 21, Greenpeace and the Nuclear Control Institute launched a global campaign to stop the shipments.

DOUBLE STANDARD? Assuming the plutonium reaches Japan without incident, the controversy still won't die. Few accuse the country, whose constitution forbids nuclear weapons, of plotting to make a bomb. Still, the plan sends a mixed message, says Jon Wolfstahl, senior analyst at the Arms Control Assn., a Washington think tank. He notes that Japan would legitimize plutonium stockpiling as Western nations are trying to get North Korea to abandon a uranium-reprocessing facility it says is purely commercial. "This has serious political implications," argues Wolfstahl.

Such acute scrutiny has the Japanese nuclear community on the defensive. Already, grass-roots opposition has made it difficult to find a site for the demonstrator plant—forcing the utilities to delay and breaking several years, until the 1990s. Beyond that, the \$4 billion demonstrator project will strain the utility financially. And they still must finish Rokkasho, a \$9.2 billion complex in northern Japan that includes nuclear waste storage, enrichment facilities, and a planned reprocessing plant that should reduce the need to import plutonium. "It's a discussion over how to afford both," says one utility official.

Indeed, some scientists now question whether Japan can use all the plutonium gathering. By 2010, the government expects to have collected 85 tons. Citing breeders and the conversion of conventional nuclear plants to burn a uranium-plutonium mixture, Tokyo plans to do it all. But the CNIC's Takagi charges that delays in these projects may leave Japan with more than 60 extra tons. Government and utility officials aren't helped by the prospect of delays. Critics look ahead 10 or 20 years, says Atsuki Suzuki, nuclear engineering professor at Tokyo University and an adviser to the Atomic Energy Commission. Japan's plan for a plutonium economy goes out 50 years. "It's not a question of whether to build fast breeders," he says. "It's simply a question of when." But as the sailing date for the space crane draws near, the issue may be far from simple.

By Karen Lowry Miller in Tokyo

Strong sense of direction.

TWENTIETH CENTURY GROWTH INVESTORS

Average Annual
Total Return as of
March 31, 1992

A \$10,000
investment on
March 31, 1972

1 Year **22.87%**
5 Years **13.84%**
10 Years **19.64%**
20 Years **18.86%**

\$317,418
Total value on
March 31, 1992

1-800-345-2021

Data quoted represents past performance and assumes reinvestment of all distributions. Investment return and principal value will fluctuate, and redemption value may be more or less than original cost.

For more complete information, including charges and expenses, call for a free prospectus. Please read the prospectus carefully before investing.



P.O. Box 419200, Kansas City, MO 64141-6200

F.S.W.

No-Load Family of Funds

©1992 Twentieth Century Services, Inc.

CANS BOTTLES PAPER PLASTIC

You just separated your trash.

Recycling is easy, isn't it?
In fact, it's one of the easiest ways you personally can make the world a better place.

If you'd like to know more, send a postcard to the Environmental Defense Fund-Recycling, 257 Park Ave. South, NY, NY, 10010.

You will find taking the first step toward recycling can be as easy in practice as it is here on paper.

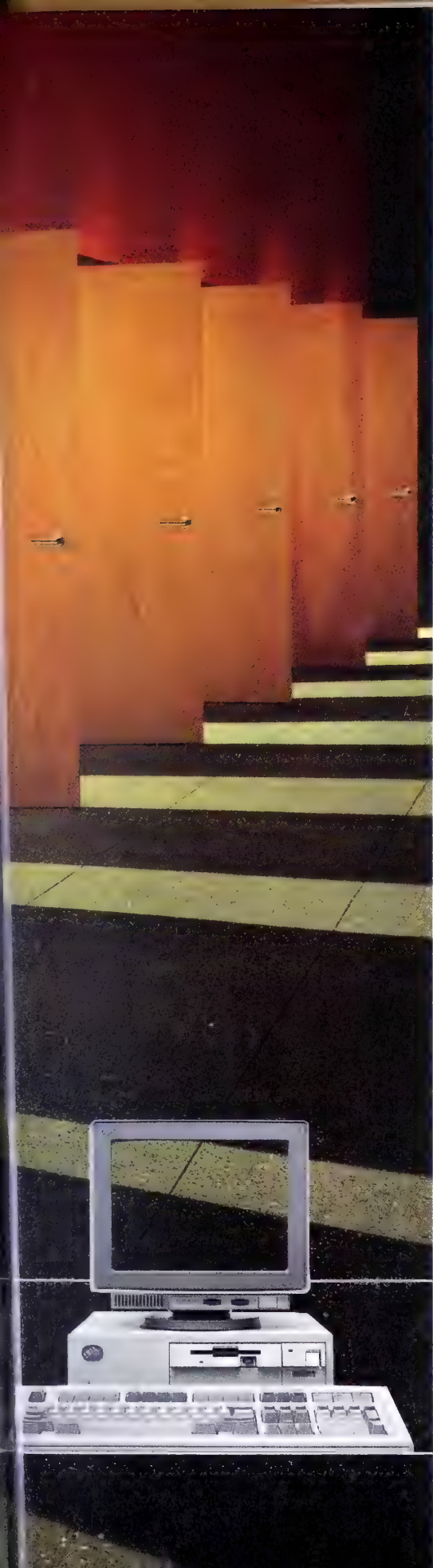
R E C Y C L E

It's the everyday way to save the world.



OS/2

Call 1-800-485-7999. **Upgrade from Windows. \$49; upgrade from OS/2 2.0 to OS/2 3.0 is \$149. **Prepared by system. These prices valid only when ordered directly through IBM. Dealer prices may vary. Offer valid in U.S.A. only, expires 12/31/92. Shipping and handling not included. IBM, OS/2 and PS/2 are registered trademarks and Workstation and Workplace Shell are trademarks of International Business Machines Corporation. All other products are trademarks or registered trademarks of their respective owners. © 1992 IBM Corp.



It's not about
fixing old windows.

It's about
opening new doors.

OS/2® 2.0 is more than a new version. It's a new vision. A true operating system that takes your DOS, Windows™ and OS/2 applications beyond the limitations of the past—lets you do more with them than you ever could with DOS or DOS with Windows.

Unlike Windows, OS/2 2.0 can run multiple DOS, Windows and OS/2 applications at the same time, in separate windows on the same screen. Print a document and calculate a spreadsheet while you create a new letter. Use icons to print documents without even opening the program. You can even “cut and paste” between *any* applications—the possibilities are endless. And with OS/2 Crash Protection,™ each running application is protected from the next, so if one goes down it won't affect the others.

Of course, there's a graphical interface that makes OS/2 easy to install, learn and use—the Workplace Shell.™ But maybe the best part is that for less than the cost of DOS and Windows, you get the capabilities of both. Plus all the added benefits of OS/2 2.0—including Adobe Type Manager.™ So for a whole lot less, OS/2 gives you a whole lot more.

For an IBM authorized dealer near you, or to order OS/2 2.0 from IBM—at special introductory prices of \$49 for Windows users and \$99 from any DOS—call 1 800 3-IBM-OS2*.



Introducing OS/2 2.0.

- Runs DOS, Windows and OS/2 applications from a single system.
- OS/2 Crash Protection helps shield applications from each other.
- Now pre-installed on PS/2® Models 56 and 57.
- Supported on most IBM-compatible 386 SX PCs and above.
- OS/2 2.0 upgrade: \$49 from Windows, \$99 from any DOS.**



THE LORD OF 84 LUMBER CO. IS BACK BEHIND THE COUNTER

Joseph Hardy isn't exactly tired of life in the fast lane, but . . .

We lose a little on every sale, but we make it up in volume!" Not exactly the pride of Madison Avenue, but that slogan worked wonders for entrepreneur Joseph A. Hardy in the early days of his 84 Lumber Co.

Ever since 1957, when he opened his first store in Eighty-Four, Pa., Hardy's approach to selling building materials has been strictly bare-bones. Heat and air-conditioning hiked overhead, so 84's spartan stores went without. No debt, no mortgages—84 dealt only in cash. Hardy's credo was frugality, and everybody knew it. To drive the point home with potential new hires, the white-socked, cigar-chomping merchant was known to prop his feet on the desk during interviews, with the holes in his worn-out shoes in plain view.

But nine years ago, something strange happened to Hardy. On the way to building a 366-store chain with \$850 million in sales, the hardworking lumber baron got restless. He turned 60, put his son, Joe Jr., in charge of the stores and started spending his \$400 million fortune with abandon. He loaded up on artwork, purchased a huge country resort—he even bought an English lord's title. By 1990, Mr. Frugality—also known as the Lord of the Manor of Henley-In-Arden—was being featured on *Life-styles of the Rich and Famous*.

NEW STRATEGY. Hardy's abrupt transformation has only meant trouble for privately held 84 Lumber, however. With the chief distracted, 84 began stretching beyond its cash-and-carry lumber niche to compete with the likes of powerhouse Home Depot.

The chain opened two many stores and added stocking such things as garden hoses and fertilizer next to the two-by-fours. As a result, earnings slid from \$52

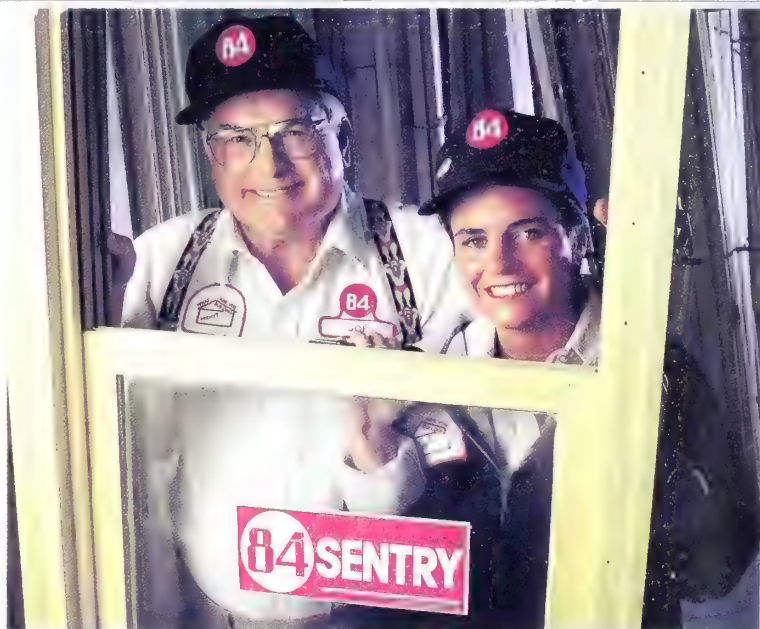
million in 1987 to \$22 million in 1989. By last year, Hardy had returned to day-to-day operations and had installed his 26-year-old daughter Maggie as his heir apparent. Still, many observers wonder at his new strategy: an expensive effort to sell building kits for do-it-yourself homes costing \$40,000 and up—land not included.

What happened? After 29 years of working in lumberyards, Hardy simply got tired of it. When a change in 84 Lumber's corporate tax status in 1983 freed up more than \$30 million in cash for his personal account, the habitually cautious lumberman decided to cut loose: "I thought, finally I can do

Why he shifted so precipitously is anybody's guess. Seemingly overnight, tightfisted Hardy was dropping money like Donald Trump. He spent more than \$1 million to build an eclectic collection of original artwork by Norman Rockwell, Pablo Picasso, and Andy Warhol, among others. He shelled out \$170,000 to buy the English lord's title and \$58.1 million to buy and restore Nemacolin Woodlands, a 550-acre retreat in the mountains of southeastern Pennsylvania. Nemacolin had been empty for six months and was a mess. But Hardy put daughter Maggie in charge and turned it into a showplace with a world-class spa, five restaurants, and an 18-hole golf course. "It isn't that I'm a crazy spendthrift," Hardy insists. "I want to invest the money so people can enjoy it."

Many at 84 Lumber, however, considered Hardy's change deeply hypocritical. Their middle-class hero had apparently sold out. "He wanted everybody to project the frugal image," remembers William D. Muldock, a former 84 executive vice-president and a 17-year veteran. "Save your money and don't be too grandiose in your living

Hardy with his heir apparent, daughter Maggie, 26: They're preparing to flood the nation with do-it-yourself homebuilding kits



what I wanted to do when I was 27 and didn't have any money."

It wasn't that Hardy, now 69, had never enjoyed the fruits of his labor. He owned condominiums in Vail, Colo., and Florida, as well as a Cessna Citation jet. But he developed a cultlike devotion among 84 Lumber employees by working as hard as they did and never flaunting his considerable wealth. Besides his dowdy attire, Hardy carved a folk-hero image by driving either a beat-up truck or an old Datsun 510. When he bought real estate for new stores, he was famous for lowballing land owners by acting like a bumpkin and paying in cash.

was Hardy's creed. Adds another former employee: "He said he was one of us, at least he really wasn't."

Things got worse at 84 Lumber after Joe Jr. left the company in 1988. It wasn't a happy separation. The younger Joe had developed multiple sclerosis four years earlier, though he suffered only a few of the disease's debilitating symptoms. Joe Sr. however, decided that the illness would be too big a constraint for his son. "I just thought he couldn't [run the company] any more," explains Hardy. Joe Jr. left in anger and now runs his own real estate development company. The tv

...e yet to patch up their differences. For the next four years, 84 had a succession of top executives—and strategies. The firm's bread and butter had always been all contractors and serious do-it-yourselfers. But in response to Home Depot's aggressive growth, 84 decided to chase pie home-improvement types. As it lost merchandising focus, Hardy made things worse by ordering an ill-timed 200-re expansion drive. "I sort of got off started being crazy about expansion," Hardy admits. "I wasn't worried about the things that had made 84."

When he came back last year, Hardy quickly stopped the slide. He shuttered stores and returned inventory to the bank. But he also saw that revenue growth was constrained by a glut of home-improvement stores. His solution: to groom daughter Maggie as a future CEO, while preparing to flood the nation with do-it-yourself homebuilding kits.

PHYTE. The Hardys see big potential in kits—enough so that they are doubling miserly long-term debt to \$40 million to finance the effort. They're spending \$3 million on advertising and plan to hire at least 200 salespeople to hawk the packs. There are 16 models. For a \$40,000 kit, 84 will collect one-third for its materials. The rest is the estimated cost for necessities as excavation, wiring, and plumbing, which buyers will need to pay separately. Maggie boldly predicts the business can generate the same level of sales as the stores within 10 years. "No one's in the market," she says.

There may be a reason for that. Many people wonder how many Americans have the will or gumption to personally take on a project. "I don't see the end consuming up with a station wagon and saying, 'I want the Windsor model,'" notes marketing consultant John Bielefeldt. Some people are also skeptical that Maggie has enough experience to make it work. She graduated from college, and her career is limited to running Neiman. Maggie's response to her critics: "I can hire some Harvard MBAs. But I'm the future of 84 Lumber Co. And if they [employees] don't like it they'll have to do something else to do with their lives." The insiders welcome Maggie's calm influence over her father and say that giving her has kept up his interest in the business. Still, Hardy isn't about to let go of his Range Rover for his old pickup, the Lord of the Manor of Henley-In-Arden, and his wife of 48 years, Lady Dorothea, will be hosting the first anniversary of the Lord- and Ladyship on July 26. The event in Nemaquin will feature an appearance by Queen Elizabeth's niece, Princess Anne. *Lifestyles* host Robin Leach also promises to show. "It's serious comedy," says Hardy. "It's his Lordship. And it's a world from Eighty-Four, Pa."

By Maria Mallory in McMurray, Pa.

WHY INFORMED INVESTORS "INDEX"



Informed investors prefer diversified, relatively predictable, low-cost investment strategies. And index funds (which have outperformed most actively managed funds over the long term*), enjoy all three benefits.

Vanguard Index Trust offers investors three no-load portfolios:

The 500 Portfolio, which seeks to track the performance of the S&P 500.

The Extended Market Portfolio, which seeks to capture the performance of medium and small sized companies as tracked by the Wilshire 4500 Index.

The Total Stock Market Portfolio, which attempts to parallel the performance of the entire U.S. stock market as tracked by the Wilshire 5000 Index.

Minimum investment in this fund is \$3,000; \$500 for IRAs.

*SEI Funds Evaluation Services.

Vanguard Index Trust is neither sponsored by nor affiliated with Standard & Poor's Corporation or Wilshire Associates. S&P 500, Wilshire 4500 and Wilshire 5000 are unmanaged indices.

Call 1-800-523-0788

For A Free Indexing Information Kit Including An Informative Booklet On The Benefits Of Indexing

Please send me a free booklet plus a Vanguard Index Trust prospectus containing more complete information on expenses and distribution charges. I will read it carefully before I invest or send money. Also send information on ☐ IRA (71) ☐ Keogh (70).

Vanguard Index Trust
P.O. Box 2800
Valley Forge, PA 19482

Name _____

Address _____

City _____

State _____ Zip _____

THE Vanguard GROUP
OF INVESTMENT COMPANIES, INC.

Some Plain Talk About Indexing



PRESERVATION PLAN ON IT

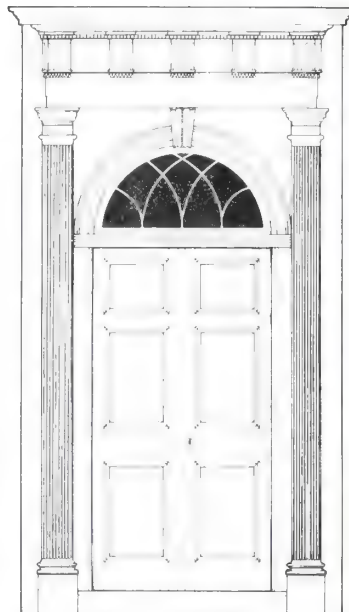
Planning on restoring a house, saving a landmark, reviving your neighborhood?

Gain a wealth of experience and help preserve our historic and architectural heritage. Join the National Trust for Historic Preservation.

Make preservation a blueprint for the future.

Write:

National Trust for Historic Preservation
Department PA
1785 Massachusetts Ave., N.W.
Washington, D.C. 20036



WHERE TO INVEST

Smart bets for the second half



Here's what you need for investment success in the second half of 1992: some money, a few good ideas on where to invest it, and plenty, plenty, of patience.

The cash? Take it out of your money-market fund, or grab it out of the bank when your certificate of deposit matures. With short-term interest rates less than 4%, you're not getting much of a return anyway.

The ideas? BUSINESS WEEK's Midyear Investment Outlook is chock-full of them. We cover the world of investment—from U.S. blue chips to zingy stocks of Third World markets, from government bonds to junk bonds.

Of course, patience has always been necessary for successful investing. But for most of the past 10 years, much money was made fast and easy—and in-

vestors were spoiled by fat, double-digit returns. No more. Now, profits will come more slowly. It's easy to see why. Just look at the U.S. economy (page 86). The recession was painfully long but not particularly deep.

Now, the economy is finally in a recovery that

is not particularly strong (charts, page 84). Slow economic growth than in most recoveries means slower employment and income growth, too.

In an election year, you might expect the folks in Washington to bolster the economy. The Federal Reserve, under Chairman Alan Greenspan, has done its part, driving short-term interest rates to the lowest levels in two decades. But unless the economy loses momentum, the Fed is not expected to ease monetary conditions much further.

What would help the economy more is a significant drop in long-term

CONTENTS

THE ECONOMIC OUTLOOK This rebound may be subpar, but it'll feel a lot better than the last few years *Page 86*

STOCKS A few stars are sparking the Dow, and they are likely to lead the rest of the market higher *Page 88*

SECONDARY STOCKS While small and midsize companies won't reignite soon, they remain strong *Page 90*

THE PROS BW asked three gurus to manage hypothetical portfolios. How'd they do? Read it and weep *Page 94*

GLOBAL STOCK MARKETS Where in the world is the smart set going? To Europe and Latin America *Page 96*

BONDS Interest rates will decline slightly, but not enough to set off another bond-market rally *Page 98*

JUNK BONDS Those sizzling junk funds are settling down now, but 11% is nothing to sneeze at *Page 100*

MUTUAL FUNDS The winning strategy so far this year: Staying away from last year's winners *Page 102*

REAL ESTATE Nowhere to go but up? It's starting to look that way—with emphasis on 'starting' *Page 104*

THE BEST Here's the lowdown on the hottest things out there and how they got that way *Page 106*

INSIDE WALL STREET The Street's more daring players are snapping up these speculative picks *Page 108*



**A slow-growing economy is not all bad for investors.
Inflation, which usually kicks up as
economic activity accelerates, should remain under control**

rates. But with a record U.S. budget deficit—and no agreement between President Bush and the Democratic-controlled Congress on what to do about it—it will be difficult for long rates to come down appreciably. And the proposed constitutional amendment that would require the U.S. to balance its budget is no quick fix. Even if the amendment were enacted, it would be years before it went into force.

But the slow-growing economy is not all bad for investors. Inflation, which usually kicks up as economic activity picks up, should remain under control. That should keep investors interested in stocks and bonds. With inflation tamed, the 30-year Treasury, yielding 7.8%, looks like a solid bet (page 98).

Now consider stocks. They're not cheap, but in the early stages of an economic recovery, they still can be rewarding (page 88). After years in the doghouse, corporate profits are starting to look better. The first quarter was better than forecast, and analysts are projecting a smart pickup as recovery moves along. Secondary stocks, which had a spectacular run earlier in the year, are now taking a breather that could last for the rest of the year. This gives investors an opportunity to snap up some of the battered health care and biotechnology stocks that had shown enormous gains for several years (page 90).

If you like to choose your own stocks, don't miss our expanded

Inside Wall Street (page 108), in which some savvy pros let you in on a host of stocks that should run well ahead of the pack. We also revisit three to stock-pickers who, six months ago, were asked for their top choices. Their picks have done sensationally, and they offer some fresh ideas for the rest of the year (page 94).

There are also plenty of opportunities abroad (page 96). In Europe, low inflation, rising earnings, and an improving business climate are providing the conditions for continued stock appreciation. Latin America's *bolsas* which have soared as the nation there modernize and open up their economies, still offer excellent prospects.

If you prefer buying mutual funds rather than doing your own stock-picking, look at our midyear fund review (page 102). Last year's stars—such as the health care funds—are now the laggards, as investors' preferences have shifted from growth stock to more cyclical stocks.

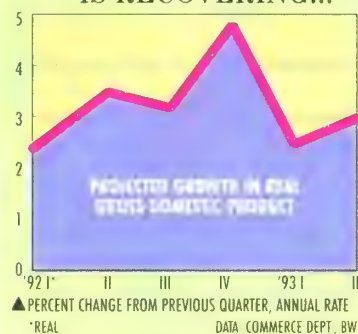
There's more. With the recovery under way, even real estate shows signs of turning the corner. Home sales are on the upswing, and prices are firming (page 104).

But there's one thing **BUSINESS WEEK** can't provide—patience. It can't be bought or borrowed. Investors just have to find it within themselves.

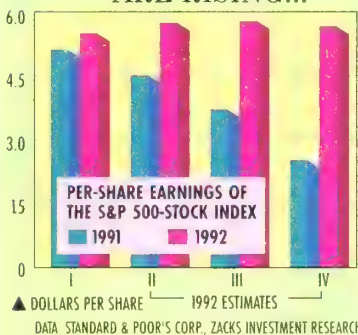
By Jeffrey M. Laderman in New York, with Mike McNamee and Howard Gleckman in Washington

THE CASE FOR STOCKS AND BONDS

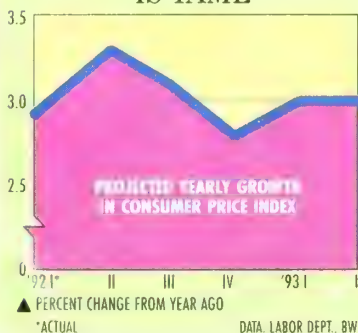
THE ECONOMY IS RECOVERING...



...CORPORATE PROFITS ARE RISING...



...AND INFLATION IS TAME



FRANKLIN

TAX-FREE FUNDS

FRANKLIN'S

PHILOSOPHY: WITH
MONEY AND FINANCIAL
PLANNING, PRUDENCE
COMES FIRST.

The company that bears his name is an established leader in offering investors tax-free mutual funds.

If you seek high current income that is tax-free, consider this: Franklin manages 33 tax-free funds, including 27 funds free from both federal and state personal income taxes.[†]

Franklin's tax-free funds deliver:

- ◆ Monthly income dividends
- ◆ Professional management
- ◆ The investment power of tax-free compounding

Call your investment advisor or Franklin today.

1-800-342-FUND
EXT. 1212

Yes! I would like a free prospectus containing more complete information on the Franklin tax-free funds, including charges and expenses. I will read it carefully before I invest or send money.

☐ I am currently a Franklin shareholder.



Name

Address

City/State/Zip

Daytime Phone

FRANKLIN DISTRIBUTORS, INC.

Member \$58 Billion Franklin Group of Funds®

777 Mariners Island Blvd., San Mateo, CA 94404-1585

BWK92
1212

[†]For investors subject to federal or state alternative minimum tax, a small portion of the income may be subject to such tax.

MAYBE NO FIREWORKS, BUT SLOW GROWTH BEATS NO GROWTH

BUSINESS WEEK sees a 3.4% expansion for the next year. Most upturns' first years average 5% to 6%



No steep dips or roller-coaster turns. No soaring advances, either. Just the steady rhythm of "slow growth, slow growth."

That may not be an exciting forecast, but compared to what Americans have been living with for nearly three years, it's bound to feel mighty nice.

BUSINESS WEEK expects the economy to grow 3.4% from the second quarter of 1992 to the same period of 1993.

That's a bit above the 3% average for the 20 forecasts in our midyear survey (table). Our modest optimism arises because we think growth will be somewhat faster during the remainder of this year than most other economists project.

By the standards of past recoveries, though, this upturn will be a snoozer. Growth usually averages 5% to 6% in the first year of recovery. This time, cost-cutting and corporate restructuring will restrain the growth of jobs and incomes, while heavy household debt will limit the upswing in demand for cars, homes, and other credit-sensitive purchases.

Even so, any solid, continuous uptrend would be a relief from three years of creeping along the bottom. Since 1989, the

U. S. has grown only 0.5% per year, on average, and until the first quarter

of 1992 no single quarter posted growth above 2% at an annual rate. To be sure, massive debt, sour real estate, widespread corporate cost-cutting, defense reductions, and budgetary woes at all levels of government still weigh heavily on the future. But as Rosalind Welton, chief economist at marketing firm NPD Group, says: "After so many years of such sluggish growth, you see a number over 3% and you want to shout, 'Wow.'"

As we see it, the economy is in a classic, consumer-driven upswing in the business cycle. Spending, abetted by the housing rebound, surged in the first quarter, shrinking inventories to an unsustainably low level. The need to replenish those stockpiles will spur output and job growth this summer—which will keep consumers scurrying back to their favorite stores. And exports will continue to buoy order books. Later on, increases in demand will spur businesses to invest more in capital equipment.

LOW PRESSURE. Low inflation and interest rates will keep the recovery proceeding smoothly. Inflation is off the worry list, probably through 1993. It has been pummeled into submission by three years of stagnation, excess production capacity, and weak labor markets. As an economic recovery of only moderate proportions will not breed much in the way of new price pressures. That's why consumer prices will probably be rising at a yearly pace of only 3%, or less, when 1992 draws to a close.

Given such a stellar performance by inflation, we believe that interest rates will stay down for the remainder of 1992.

Long-term rates have room to drift a bit lower this summer. The bond market's expectations of stubborn inflation are a key factor that has kept long rates high. But as expectations adjust to the reality that inflation is truly under control, some of the upward pressure on long rates will abate.

As for short-term rates, anything more than one last downward nudge of the federal funds rate by the Federal Reserve seems unlikely. We believe that the Fed's goal is to generate a moderate recovery that will keep inflation in check. Call it a soft takeoff. The fir-

empt, in 1991, didn't fly, but 1992 could be different.

The risks of such subtle fine-tuning in keeping some forecasters extremely wish. Lacy H. Hunt of Hongkong Bank Group bases his poor outlook for the economy, in part, on the weakness in money and credit growth. BUSINESS WEEK expects a stronger second half, but Hunt worries: "The best of this year already passed."

Even with a rebound in spending, consumers will continue to get their finances into better shape. They are pay-

can't spend much faster than that pace without help from savings or credit. However, savings are already skimpy, and households are more interested in paying off debt, not taking on new IOUs.

The early quarters of recovery will also get a boost from inventory rebuilding. In fact, some economists worry that the current low stock levels are holding back domestic demand. "People are out shopping, and the goods they want aren't in the stores," notes Donald P. Hilty, chief economist of Chrysler Corp. Restocking warehouses will likely con-

investments in new plants and equipment that had been put off while the economy stagnated. Capital spending will follow its usual recovery pattern—turning around after the economy, and accelerating as the upturn becomes firmly entrenched. However, more of the outlays will go for new equipment, while the glut of commercial and office buildings will hold back the overall gain.

The housing recovery, which began last year, will remain in place. Mortgage rates will fluctuate, hovering near 9%, but the interest-rate leg of the housing recovery is finished. From here on, growth in jobs and incomes will have to provide the financial foundation for further gains in housing demand.

Exports, which now account for a record 22% of industrial output, will be a major source of strength for manufacturing during the recovery. Economic slowdowns in Japan and Europe will retard foreign demand, but rapid export growth to Latin America and the new industrializing countries in Asia will provide a boost until the rest of the world gets back into gear. The problem is that those export gains will go for naught in terms of the trade deficit's overall impact on the economy. As the U.S. recovers, Americans' relentless propensity for imports will result in a slight deterioration of the U.S. trade deficit.

THE PEROT FACTOR. The stronger the economy, the better President Bush's chances for reelection. Robert Brusca of Nikko Securities Co., the most bullish of our forecasters, calls his outlook "the Bush reelection forecast." However, the ground swell of support for independent Ross Perot could be saying that even in a stronger economy, Bush faces big problems from a disillusioned electorate.

Because of the uncertainty that would follow a Perot or Clinton victory, the election is fast becoming the wild card in the outlook. The future of federal spending would be up in the air, businesses may put capital projects on hold, and the stock and bond markets would at least initially react negatively to any change in the status quo. One danger: A bearish bond market could propel mortgage rates above 10% and stall out the housing recovery. Philip Braverman of DKB Securities warns that if Perot's candidacy forces Congress to decide the election, such a big unknown could "paralyze" growth in the fourth quarter.

Of course, a few more months—and a lot more economic reports—will pass before the Nov. 3 elections. If Bush can turn his campaign around, the outlook for the coming year isn't likely to change much. If he can't, the forecasters—including BUSINESS WEEK—may have to crank out some new numbers.

By James C. Cooper and Kathleen Madigan in New York

WHAT ECONOMISTS ARE FORECASTING

	Percent change in real gross domestic product			1992		1993	IIQ '92-	IIQ '93
	II	III	IV	I	II			
BERT BRUSCA Nikko Securities	3.8	5.6	5.2	4.6	1.5	4.2		
JOHN REASER First Interstate	2.8	3.7	3.8	3.7	3.5	3.7		
SALIND WELLS NPD Group	3.3	4.4	4.0	3.5	3.0	3.7		
GER BRINNER DRI/McGraw-Hill	3.5	3.8	3.2	4.2	3.1	3.6		
HARD A. STUCKEY Du Pont	2.5	3.5	3.6	3.3	4.0	3.6		
WALD P. HILTY Chrysler	2.4	2.7	3.2	3.7	4.3	3.5		
JES C. COOPER & KATHLEEN MADIGAN BW*	3.5	3.2	4.8	2.5	3.0	3.4		
WALD RATAJCZAK Georgia State University	2.3	3.6	3.1	2.7	3.2	3.3		
WYNETH T. MAYLAND Society National Bank	3.0	3.5	2.5	3.7	3.2	3.2		
ART G. HOFFMAN PNC Financial	2.4	3.1	3.0	3.2	2.9	3.1		
WARD L. KEEN Conrail	2.8	3.1	3.2	3.0	3.1	3.1		
L. J. PALASH McCarthy, Crisanti, Maffei	3.0	3.5	3.0	3.0	3.0	3.1		
KEY D. LEVY CRT Government Securities	3.0	3.3	3.0	2.8	3.0	3.0		
WALD H. STRASZHEIM Merrill Lynch	3.3	3.1	3.1	3.0	2.9	3.0		
RENCE H. MEYER Laurence H. Meyer & Assoc.	2.7	3.0	2.9	2.8	3.0	2.9		
W. L. CIMINERO Fleet Norstar Financial Group	2.8	2.2	1.9	2.0	2.2	2.1		
JOSEF FOSLER Conference Board	2.1	2.3	1.4	1.2	2.9	2.0		
GARY SHILLING A. Gary Shilling & Co.	2.0	2.0	2.0	2.0	2.0	2.0		
PHILIP BRAVERMAN DKB Securities	1.5	2.0	2.0	1.5	2.0	1.9		
LACY H. HUNT Hongkong Bank Group	1.4	1.2	1.1	1.2	1.7	1.3		
W. L. H. HUNT	2.7	3.1	3.0	2.9	2.9	3.0		

BUSINESS WEEK

DATA BW

own debt at a record rate, and low interest rates have reduced the cost of holding debt. Gary L. Ciminero, chief economist at Fleet Norstar Financial Group, estimates that this year households will save \$42 billion in interest by either paying off their old debts or refinancing their mortgages. In addition, the housing recovery is shoring up home prices—the major source of consumers' wealth. But the reliquidation will take time.

OUT OF STOCK? Until then, the pressure on income growth to sustain spending. Payrolls rise by 150,000 to 200,000 jobs per month, compared to the recovery pace of 250,000 to 300,000, real aftertax income won't grow more than 2.5%, and consumers

tribute more than one-quarter of the growth expected in the next 12 months.

Companies have also made considerable progress on their debt problems. For the first time in more than a decade, corporations are relying more on equity than on debt to raise funds. Companies are swapping short-term debt for lower-cost, long-term debt. Interest payments as a percentage of cash flow are declining. And profit margins are improving. For nonfinancial businesses, profits as a percentage of output hit 7.6% in the first quarter—the fattest cushion since mid-1990. On balance, the stage is set for a significant improvement in corporate earnings in 1992.

Better cash flow means that many companies will be able to go ahead with

A HANDFUL OF SIZZLERS WILL IGNITE THE MARKET

The S&P 500 looks dormant, but there's much turmoil below the surface



Judged by the gains of the Dow Jones industrial average, the stock market is doing very nicely, thank you. The world's most closely watched market measure punched through the 3200, 3300, and 3400 markers, racking up gains of 6.4% since the beginning of the year. Yet you can't find many jubilant investors these days.

That's because the stock market, by almost any measure other than the 30 Dow stocks, has been spinning its wheels. The Standard & Poor's 500-stock index, the benchmark for most professional money managers, is 1.8% below its level on New Year's Eve. Counting dividends, the S&P 500 is slightly in the red for the year. And after an initial burst early in the year, secondary stocks have fallen back (page 90).

Even the Dow's advance has not been broad-based. Much of the gain is concentrated in a handful of economically sensitive or "cyclical" stocks such as General Motors, Union Carbide, and Allied-Signal. Such "narrowness" worries many pros, who prefer to see large numbers of stocks making smaller gains than a few making large ones. "I've been in this business 23 years," says Hersh Cohen, who co-manages two Shearson funds with \$2.8 billion in assets, "and I can't recall a market that is led by a mere handful of stocks."

GAINING SPEED. Perhaps not. But for all the worries, which include a deceleration in commercial

real estate, a surprise hike in the price of oil, and the potential that the Presidential election could wind up decided by the House of Representatives—the market has turned in a remarkably strong performance. And odds are that the Dow's stars will soon lead the rest of the market to higher ground.

True, stocks are not the bargain they were 18 or even 6 months ago. Stocks now sell at a relatively high price-earnings ratio of 25, and they pay out a

skimpy dividend yield of 3%. But the economy is slowly expanding, inflation appears tame, and the Federal Reserve in keeping short-term interest rates at the lowest level in two decades, is acting investor-friendly. And don't forget, stock prices usually rise in Presidential election years (box).

That means the stock market—among more of the stocks in the market—should pick up momentum. "The economic expansion is just getting underway, and corporate earnings are accelerating," says Steven G. Einhorn, co-chairman of the investment policy committee at Goldman, Sachs & Co. "That's not the time when bull markets end," Einhorn says the broad stock market should deliver a 12% to 15% total return over the next 12 months, with about 7% in the remainder of the year.

DUMPING DEBT. True, Einhorn's forecast does not sound like a raging bull market, but this is no calf either. From the 1990 bear-market lows, the Dow is up 42.5%, the S&P 500 38.8%. Those gains came from falling short-term interest rates. Now, with money or perhaps all of the rash slashing over and done with, stocks have to make it on corporate earnings. And while each quarter should look a little better, none will be terribly robust because the economic expansion will be modest.

Remember, too, while corporate earnings will be going up, so will the number of stock shares outstanding. After issuing \$580 billion in debt and reducing the amount of equity by some \$



The expansion is just getting under way, so equities are the right play

on between 1984 and 1990, corporations have been taking advantage of rising stock prices to deleverage their balance sheets. They already have sold \$1 billion worth of equity to the public this year, according to Securities Data. That includes the record \$2.5 billion of GM common stock on May 20, which was gobbled up by investors. In all of 1991, corporations raised \$55.8 billion in new and secondary common stock offerings.

Although the broad market averages, such as the S&P 500, look as if they have been dormant, there's much turmoil beneath the surface. Investors have been dumping the big growth stocks that led the market for years. Through the first half of the year, the growth-stock half of the S&P 500 has fallen 3.4%. And the pounding isn't over yet.

On June 2, pharmaceutical giant Schering-Plough fell 9.3%, or \$7 a share, after announcing that second-quarter sales would climb only 5%—well below expectations. Shareholders in other growth stocks, such as The Johnson & Johnson, Philip Morris, Merck, are staring at losses, too. Even the once unflappable Wal-Mart Stores fell 8.1% since the year began.

USTER IPOs. The sell-off in growth stocks, although disruptive and scary, is the market correcting excesses and drawing attention to the economic expansion and its main beneficiary, the cyclical market. The S&P/BARRA Value Index, which has most of the S&P 500's cyclical stocks in it, gained 5.6% through May. "The correction is healthy," says Lee Kopp of Kopp Investment Advisors Inc., whose portfolios are down about 9% this year after a sensational 101% gain in 1991. "I'm more comfortable with the market today than I was in January." Kopp looks for new opportunities. One of his top picks is Bank of America, which he says is "an investment turnaround in the New England area."

High-flying new issues, often a sign of rampant speculation, have slowed down as well. Robert Natale, who edits *Standard & Poor's Emerging & Special Situations*, says initial offerings have slowed to a record 60 deals in the first half of the year. But more important, companies going public are issuing their stock at lower prices than those proposed when the registration statements were filed several months ago. Says Natale: "The IPO market is out of the IPO market."

ELECTION JITTERS? NO REASON TO WORRY

Sure, stocks look pricey, the recovery seems shaky, and the President is sinking in the polls. But those are no reasons to shun the market. If past election years are any guide, it doesn't really matter whether George, Bill, or Ross wins. Investors, by and large, do just fine.

Of course, this is no typical election year. The last election in which so strong a third-party candidate emerged was 1912, when former President Theodore Roosevelt ran against his successor, William H. Taft, a Republican, and opened the door to the White House for Democrat Woodrow Wilson. Still, even that year, Wall Street eked out a 3% gain.

Election years are great for stocks—if for no other reason than because the folks in power do everything they can to stay there. That includes pumping money into the economy and, ultimately, into voters' pockets. The market made gains averaging 14.1% in 26 of

the last 40 election years (going back to 1832). The 12 down years suffered losses, on average, of 9.8%. Two election years showed no changes.

10 FOR 10. The market looks even better in the last seven months of Presidential election years—just the period investors face now. In each of the last

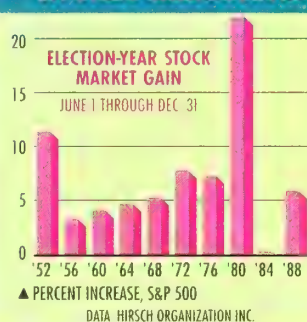
10 election years, the market stood higher at yearend than on May 31 (chart). "These cycles are not foolproof," says Yale Hirsch, author of the *Stock Trader's Almanac*. "But 10 out of the last 10 suggests there may be something to it."

Although Hirsch's data suggest good things for 1992, there's a danger sign for 1993. In 22 of the

last 40 postelection years, the returns were negative, with losses averaging 14%. The bright spot was that the last two such years, 1985 and 1989, bucked the trend—with 26% gains in each of those years. So, don't plan on an automatic sell come Jan. 2.

By Jeffrey M. Laderman in New York

STOCKS WERE WINNERS IN PAST ELECTIONS



Mutual-fund investors, however, have not lost their passion for the stock market, even though most equity funds have not shown the dazzle of the Dow index. According to the latest available numbers, investors poured \$28 billion into equity mutual funds in the first four months of 1992 vs. only \$8.3 billion in the same period of 1991. And the flow of cash into equity funds continues strong.

The flood of fund money, in fact, is one of the market's chief sources of

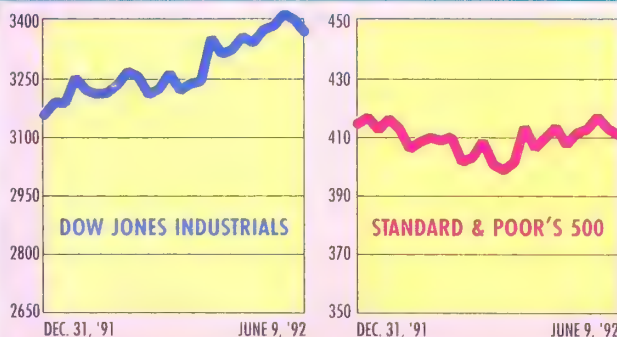
strength. It has helped absorb the huge increase in new equities and provides buying power for the next up leg. "I'm impressed by individuals continuing to put money in equity funds," says Rao Chalasani, investment strategist for Kemper Securities Group. "I would have thought after not making money in the first quarter, they would have slowed down." Adds market analyst Laszlo Birinyi of Birinyi Associates: "The individual investor is back and here to stay."

Individual investors back in the mar-

ket? During the 1980s, individual investors were net sellers of stocks. Then again, it's no stranger than seeing General Motors in the market's vanguard. Until the auto maker stumbled in the 1980s, each new high in GM stock was a reliable forecaster of higher stock prices ahead. It's too soon to tell whether GM will regain its traditional leadership role. But you can be certain of this: When General Motors is out in front, it's not the time for investors to leave the stock market.

By Jeffrey M. Laderman in New York

WHILE THE DOW CLIMBS, THE S&P 500 LANGUISES



A SECOND WIND FOR SMALL COMPANIES?

Secondary stocks won't blast off again soon—but their basic strengths remain



For investors in secondary stocks, the question that lies ahead in 1992 is reminiscent of the lyrics of an old tune, but with a

you love me in December as you didn't in May?"

For small and midsize stocks, a cold spring is turning into a chilly summer. True, small-capitalization stocks are actually beating the dreary overall market so far this year, with a 4.6% gain in the Russell 2000 index of small stocks, vs. a 1.1% decline in the Russell 1000 index of large-capitalization stocks (chart). But most of that gain took place in one month—January. The rest of the year has been dreadful, with biotechnology and health care stocks—the superstars of 1991—getting plastered in March and April, as stocks fell on even the most mildly disappointing news. Midsize companies, as measured by the popular Standard & Poor's

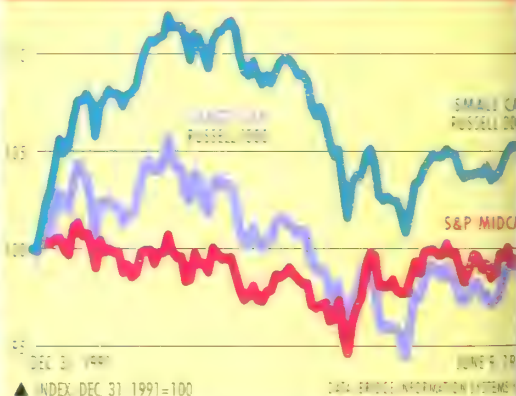
small-cap mutual funds," says Cliff Henry, whose Worthington Growth hedge fund gained 65% in 1991 but has hardly budged so far this year.

With the near-term picture looking crummy, the stock-pickers among small-cap mavens are coming into their own. For such intrepid souls, the biggest hunting ground is the most depressed area, health care. Money managers reason that the blow-off in biotech stocks was understandable—since the biggest gainers included companies with only the promise of earnings. "When stocks double, triple, and quadruple over an 18-month period, you're going to get con-

is to seek out small, underappreciated companies that have yet to receive much of a following among Wall Street analysts. Such companies tend to perform well even when small-cap stocks generally are taking a dive. And here again, some of the smartest picks are in the health care arena. Richard Freeman, who runs Shearson Lehman Brothers' small-cap funds, is enthusiastic about one such stock—Advanced Polymer Systems. The company is a developer of advanced drug-delivery systems, and recently signed an agreement with Johnson & Johnson. "This is the kind of company that has gotten very little at-



SECONDARY STOCKS HAVE LOST THEIR ZING



CORRECTION. Money managers who specialize in secondary stocks are talking about the months ahead as a period in which "stock-picking" will be at a premium. Translation: Small-cap stocks, on the whole, will be dogs for most of the remainder of the year. But don't despair. All of the fundamental factors that have sustained small-cap stocks remain intact. Interest rates remain in the doldrums, giving support to higher price-earnings multiples. Earnings have been surprisingly strong for many small-cap growth stocks. So in all likelihood, what's going on is a correction in a sustained bull market for secondary stocks that has seen small-caps up 50.3% since the beginning of 1991. The crucial factor—institutional interest—remains particularly strong. "There's still a lot of money going into

solidation after a while," says Todger Anderson, president of Denver Investment Advisors Inc., which runs \$6 billion in mid-cap portfolios. Now that the hot air has been blown out of the group, small-cap managers, including Anderson's, are moving back in. "All of the health care companies that deliver earnings will do O.K. and at least keep pace with the market," he says.

Anderson's money managers are buying stocks such as U.S. Surgical and U.S. Healthcare—leaders in medical devices and health maintenance organizations, respectively. They are also moving cash into homebuilding stocks such as Kaufman & Broad, Oakwood Homes, and Clayton Homes.

Another smart foul-weather strategy

tion," says Freeman. "You need patience to wait until people discover them."

Alas, investors seem to have a dearth of patience nowadays. They are shy away from potential small-cap "discoveries," instead deploying their money in large-cap cyclicals and interest-rate-sensitive outfits such as automotive and financial companies. Liquidity in small-stocks has suffered, and hedge-fund manager Henry observes that bid-spreads in over-the-counter issues have widened considerably. It's reminiscent of the troubles that beset investors in days after the 1987 stock-market crash. And let's not forget: That turned out to be the best time in decades to buy secondary stocks.

—Cliff Henry, Worthington Growth Fund

**PEOPLE IN THE
COMPUTER BUSINESS
HAVE BEEN TRYING
TO IMPROVE ON
COMPAQ FOR YEARS.**

GUESS WHO

It wasn't easy. Changing a company our size never is. But we listened to our customers, we studied our competitors, we took a long look in the corporate mirror. Then we did the only thing we know how to do. We rolled up our sleeves and went to work.



The result of all this distribution and, naturally, new products. Everything from inexpensive machines for basic computing needs, to advanced products

that stretch the envelope of technology at prices that our customers will find compelling and competition should find well, competitive.

What you won't see are stamped-out, second-rate products with the COMPAQ name stuck at the end of somebody else's assembly line.

While that may be the way of the world, not the COMPAQ way.

We've always believed that the performance, compatibility, reliability, and actual affordability of a computer has more to do with innovation than with imitation.

So instead of asking

ALLY DID IT?

of the world's fin-
computer engineers
rget all they knew
building great com-
s, we asked them
ke all they knew
uild great inexpen-
computers.
gineering to cost vs.
eering at any cost.
and as the best engi-
do, they saw this
a limitation, but as
hallenge. A hurdle to
come. A problem to
r, twist, push, pull
ultimately solve.
y questioned man-
ring techniques,
y challenged our sup-
they turned every
of every process
si down, inside out

and sideways until they
had managed to shake
out every unnecessary
cost or component.

No more over-think.

No technology sim-
ply for the sake of new
technology.

And along the way to
our new and improved
destination, we learned a
little something.

We learned that what
makes a COMPAQ PC
more than just another
computer isn't simply the
engineering. Or design.
Or component quality.
Or product testing.

It's not just the more
tangible things such as
compatibility or near-
zero defect production.

When all is said and
done, what truly makes a
COMPAQ far more than
just another computer is
simply passion.

The passion to push
technology, the passion
to recognize the idea
whose time has come,
the passion to listen and
learn and adapt to what-
ever our customers may
want today while antici-
pating what they might
need tomorrow.

In other words, the
passion to do things right
for the customer.

For more information,
just call 1-800-345-1518,
ext. 206 in the U.S., or
call 1-800-263-5868, ext.
206 in Canada.



THREE PROS, THREE STRATEGIES, TWO COUPS

A couple of portfolio managers beat the market—and one tied it—with vastly divergent game plans



If weather forecasters were this good, few of us would ever get caught in a downpour. At the end of last year, *BUSINESS WEEK* asked three experts

how they would invest a hypothetical portfolio for 1992, putting \$10,000 into each of 10 stocks. One matched the Standard & Poor's 500-stock index, which rose 7% from Dec. 17 to June 9 of this year, while the other two gurus beat the S&P by miles.

The three got their results by following completely different philosophies. Star performer Fred L. Astman, who manages First Wilshire Securities Management Inc. in Los Angeles, constructed a portfolio that appreciated a stunning 44% in the first half, packing it with tiny companies whose price-earnings ratios rarely go higher than 10. Robert E. Torray, president of his own investment firm in Bethesda, Md., gets excited about beat-up stocks that other investors can't sell fast enough—and produced a 16% average price increase. Carmine J. Grigoli, formerly head of equity analysis at First Boston Corp., times his investments to the business cycle, an approach that helped his portfolio rise 7%.

BETTER DAYS AHEAD. In the second half, they'll keep right on going their very separate ways. Far from being daunted by the decline in small-capitalization stocks over the past three months, Astman thinks his favorites will do even better as the recovery kicks into higher gear. "We're looking at a good second half for one reason," he says. "The NASDAQ topped out in the middle of February." Now, Astman thinks his niche-company stocks are an even better buy than at yearend. Astman's most stupendous pick, Herbalife International, has about tripled since mid-December, from 2¾ to 8, and he expects the performance to continue. He thinks sales will exceed \$300 million in 1992, up from \$195 million in 1991, as Herbalife's health-food products make further inroads in its 15 foreign markets. Despite the stock's run-up, "we're still buying it," Astman says.

Astman also retains his enthusiasm

for CalFed, whose stock rocketed 146% in the first half. Although its holdings in savings and loan associations are shaky, CalFed's core bank business in Southern California was profitable in 1991. "They have \$22 [per-share] book value, and the stock's at 4," he says. Astman believes CalFed's hidden assets make it a potential takeover target. And he will keep buying shares of his third-best performer, Pancho's Mexican Buffet, whose stock is up 63% since yearend but still trades at only 11 times projected 1992 earnings. "Most restaurant stocks are at much higher multiples," says Astman,

nology Development because "it's so solid as a rock and has more cash than stock capitalization." At 3¼, REFAC shares are selling at six times projected 1992 earnings. Another kind of cleaner-upper—likes is RTI Inc., which uses cobalt radiation to zap salmonella and trichinosis bacteria out of food and medical products. "It's a unique company whose stock has been as high as 15 and is now trading below 1," says Astman. That makes RTI a bargain, in his book.

Torray is a bargain hunter, too—he has his idea of a turnaround takes years, in months. "The flight into cyclical does

THE GOOD, THE BAD, AND THE FUTURE	ASTMAN	TORRAY	GRIGOLI
	Percent change, 12/17/91 to 6/9/92*		
	Up 44%	Up 16%	Up 7%
Bigger winner	Herbalife Intl. +191%	Laidlaw +37%	Phelps Dodge +51%
Bigger loser	Nature's Sunshine -25%	Humana -17%	The Limited -26%
Top pick for the second half	Ocean Bio-Chem	General Cinema	Alcoa
*STANDARD & POOR'S 500 INDEX, THROUGH JUNE 9, 1992		S&P 500 Up 7%	Source: First Wilshire Securities Management Inc.

who thinks Pancho's all-you-can-eat outlets in the Southwest will continue to draw crowds.

His top new pick for the second half is Ocean Bio-Chem, a maker of boat waxes and polishes that enjoyed a 29% sales rise in the first quarter—despite the new luxury tax. Astman says new cleaning products for boats and recreational vehicles will boost earnings by 100% in 1992. The stock is trading at 1½. He's also bullish on patent developer REFAC Tech-

impress me at all," he says. The portfolio he put together at the end of 1991 produced snappy results, partly on the strength of such much-maligned companies as Times Mirror (up 34%), warehouse Laidlaw (up 37%), and American Express (up 30%).

You might expect that Torray, being a long-term investor, would stick with the companies he picked in December. But he has a new bunch of wallflowers on his list. He considers General Cine-

ch controls 62% of Neiman-Marcus bought Harcourt Brace Jovanovich year, an "outstandingly managed company" despite second-quarter losses a scant following among analysts. General Cinema is trading at 24%—at Torray calls a "fair to low price for very good business."

Where Torray parts company with his most outrageously is in the health sector. Although Humana was the stock in his yearend portfolio that —by 17%—he says that "this is where I'd buy, not sell." Torray thinks makers and health care purveyors under a cloud that hides long-term promise. For example, he has a big position in Upjohn, whose stock is close to 52-week low, at 33. "Not one analyst likes it, but I think it's a more than likable company," he says.

In the second half, Torray believes banks and financial services companies keep gaining ground, mainly because they were oversold last year. He would add Citicorp, Chase Manhattan, Chemical Bank to Salomon and American Express on his buy list in this order. But he emphasizes that he will hold them for 5 to 10 years. "I don't play trends," says Torray—as if we hadn't heard.

FIT TIME. Far more conventional, Grigoli matched the market average with yearend stock picks. Playing the recovery, he hit pay dirt with Phelps Dodge, whose stock was up a thumping 50% so far this year. He says it's "still up, despite the uptick," with a price of 13. Grigoli would also stick with Motorola and Intel, whose stocks have up 35% and 14%, respectively, since January. "I don't think this portion of investment cycle is complete for these issues," he says. At 80 and 50, he says, these stocks "haven't reached peak yet."

Grigoli wouldn't do a lot of swapping in his portfolio, although he says he would replace Johnson & Johnson with Merck, because "recovery will pose a problem for traditional growth stocks." He also thinks Waste Management is a buy now: At 36%, with a price of 28, down significantly, selling at one of the cheapest valuations in the last decade," he says.

Grigoli points out that the stock market as a whole typically performs better in the year after a Presidential election. He also says bond investors' position fears are putting upward pressure on long-term interest rates, which will trigger a 7% to 12% correction in the stock market before the summer is over. "So I'd consider taking profits," he says. And investors who followed these pieces of advice certainly have a pocketful of profits to take.

By Joan Warner in New York

GET YOUR FEET WET WITHOUT GETTING IN OVER YOUR HEAD.

Maybe you've wanted to get into growth stocks, but you're not sure where to start. You're unfamiliar with the market or you simply don't have much money to invest.

Look into Janus Twenty Fund.

By investing most of its portfolio in approximately 20-30 carefully selected growth stocks, Janus Twenty Fund had a 26.42% total return for the one-year period ending March 31, 1992.*

Our No Minimum Initial Invest-

ment Program lets you test the waters. You can invest in Janus Twenty Fund for as little as \$50 a month. It's a no-load investment that lets you dip into the exciting world of growth stocks without worrying about going off the deep end.**

Call or return the coupon for a free prospectus containing more complete information. Please read the prospectus carefully before you invest or send money.



JANUS TWENTY FUND

P.O. Box 173375, Denver, CO 80217-3375

1-800-525-8983 Ext. 612

* Per Lipper Analytical Services, Inc., for the periods ended March 31, 1992, Janus Twenty Fund's average annual total returns for one and five years were **26.42%** and **16.82%**, respectively, and **18.27%** for the life of the Fund from April 30, 1985 through March 31, 1992. Past performance does not guarantee future results. Your return and share price will vary and may be worth more or less at redemption than at purchase.

**You should consider your ability to continue in such a program in view of the possibility that you may find it necessary to redeem your account in periods of declining Fund share prices as well as during periods of rising prices.

YES - I would like to know more about Janus Twenty Fund!

Name _____

Address _____

City/State/Zip _____

Send to:

Janus Funds

P.O. Box 173375

Denver, CO 80217-3375

1-800-525-8983

Ext. 612

BW 612

The World's Smallest Fax Machine



Check with the Guinness Book Of Records*. The new RICOH PF-1 weighs just 5½ pounds, and faxes 8½ x 11 documents. So call 1-800-63-RICOH ext. 1367 and put the smallest fax in the world in your briefcase.

RICOH®

Where Imagination Becomes Reality

Worldwide Facsimile Sponsor
1992 Olympic Games



36 USC 3605

* As certified by the Guinness Book Of Records

THE WORLD ACCORDING TO STOCK-PICKERS

Despite glitches in unification, Europe still looks fairly hot



Hermann Schweizer, a soft-spoken money manager who tends to the needs of the ultra-wealthy at Zurich's Bank Julius Baer, had a big change of heart

recently. With little fanfare, he started pulling money out of U.S. stocks, which have enjoyed a brisk advance, so he could invest more cash in bourses elsewhere in the world.

At first glance, that may seem a risky portfolio strategy. After all, the Bundesbank and Bank of Japan have been keeping interest rates high to combat inflation. But Schweizer has no doubt that he is on the right track. "I simply can't see interest rates staying this high," he says.

BOLSA BULL. Schweizer is hardly alone. In financial capitals around the world, global stock-pickers are becoming increasingly convinced that the trend toward lower interest rates that began in the U.S. will spread to other economies in coming months. That could be welcome news for Japan, where tight money and a gathering recession have pushed the Nikkei stock average down 22% this year alone. It could provide even more zest for the emerging *bolsas* of Latin America, which are already sizzling amid a privatization boom. And it could add further fuel to the markets of Europe, where hopes for an economic rebound have recently begun to make stocks come alive.

Indeed, money managers believe that it is Europe's turn to shine as a slow-moving global economic recovery begins to take hold. Not even Denmark's recent rejection of closer European Community cooperation and a common EC currency

have dampened the money mavens' conviction that the region's economy is turning around. Says Eric Elstob, joint managing director of London's Foreign & Colonial Investment Trust PLC: "I'm a real optimist."

Low inflation, rising earnings, and an improving business climate are driving much of this enthusiasm. The EC is scheduled to drop all internal trade barriers on Jan. 1, 1993, and corporate profits are already beginning to improve as several years of slimming down start to

discipline could still permit a modest economic recovery, while keeping inflation under 4% for 1993, and perhaps even 1994.

Although Germany's \$1.4 trillion economy will remain Europe's driving force, analysts think many of the Continent's best values lie elsewhere, in countries such as Sweden, Italy, Spain, and France. Andrew Bell, chief European equities strategist at London's Barclay's Zoete Wedd Securities Ltd., for example, likes French auto maker Peugeot, which

is trading at a cheap price-earnings ratio of 5, vs. an average of 17 for the Paris Bourse.

Bell is equally enthusiastic about Norsk Hydro, the big Norwegian oil and electricity producer. He also rates Sweden's Volvo as a "strong buy." Although Volvo was hit hard by slumping yuppie-car exports to America, he argues that the automaker is set for a substantial turnaround as the U.S. economy improves.

SWISS STAKE. Volvo isn't the only attraction among Scandinavian stocks. Devastated by high interest rates, plunging real estate prices, and a collapse in trade with the former Soviet Union, markets in Sweden, Norway, and Finland have slumped to four-year

lows. But Richard L. Holbrook, global equities director at Bailard, Biehl & Boser, based in San Mateo, Calif., says that all this has uncovered some good value. One is Elkem, a diversified Norwegian mining outfit selling at a third of its 1990 level.

With an average p-e ratio of 15, third below that of the U.S. market, Switzerland, too, offers an enticing combination of reasonable value and high earnings-growth potential. In his und



bear fruit. As a result of Europe-wide cost-cutting, corporate profits could jump as much as 15% next year alone, estimates Heinz J. Hockmann, managing director of Frankfurt's Commerz International Capital Management.

At the same time, few analysts believe that rates will fall much as long as Bundesbank President Helmut Schlesinger remains preoccupied with inflation. With most European currencies already tied to the German mark, such

ed office, a half-block y from the elegant jewel- and designer boutiques t line Zurich's stately hofstrasse, Bank Baer's weizer smiles as he reels his favorites. "Ciba-Geigy, he Holding, and Sandoz—extremely heavily weight- n them," he says. Europe-engineering and construc- issues are also high on l managers' buy lists this r. Many companies are ed to benefit from rising al spending on infrastruc- , including the West's billion-dollar program to ild the former communist ld's ailing nuclear power ts. Equities strategist , for one, is high on Asea, Swedish part of the multi- onal ABB Asea Brown Bo- engineering group. And , construction booming as n pours hundreds of bil- s of dollars into rebuilding ern Germany, Commerz' kmann recommends htief, a major German ling and property group large, undervalued real te holdings across the try. Many analysts also eve profits at German tronics giant Siemens d rise 20% next year be- e of the flood of cash going into the nstruction effort.

telecommunications companies are expected to profit from the global s on infrastructure. Many analysts r Cable & Wireless, the British long- nce telecommunications company. Hans Kaufmann, head of Swiss ech at Bank Baer, recommends As- , one of the world's largest providers orporate telecom networks. With its k price down 75% since 1987, "it's a ain," says Kaufmann.

ED FOR GROWTH. Oscar A. Castro, folio manager at San Francisco's . Capital Management, is looking bel Europe for telecommunications is- . One of his favorites is Telefonos Mexico. In the midst of a nationwide ring campaign, Mexico's telephone opoly is trading at a p-e ratio of 14, pared with an average 15 in the ican market. That's despite a five- appreciation of Telmex stock in the few years. With cellular telephone allations growing at a rapid pace, ro is also high on such mobile-phone ators as Hong Kong-based Hutchi- Whampoa, Britain's "very hot" Vo- one Group, and Atlanta-based Bell- th, which has six fast-growing chises in Latin America.

THE PROS' TOP FOREIGN PICKS

Company Description	Price change Dec. 31-June 6	
	In local currency	In U.S. dollars
EUROPE		
SIEMENS German electronics giant	9%	4%
CIBA-GEIGY Swiss drug maker	20	13
VOLVO Swedish auto manufacturer	32	27
JAPAN		
AJINOMOTO Food producer	-5	-7
TDK Electronics manufacturer	7	5
ASIA		
DEVELOPMENT BANK OF SINGAPORE Banking and development financing	18	18
HUTCHISON-WHAMPOA Hong Kong telecommunications company	33	34
LATIN AMERICA		
CHILE FUND Closed-end fund investing in Chilean stocks	56	56
TELEFONOS DE MEXICO Mexican phone monopoly	17	17

DATA: BW SURVEY OF FUND MANAGERS, BARCLAYS DE ZOEETE WEDD SECURITIES LTD

While Telmex remains the leading Latin pick for many fund managers, a crop of lesser-known growth issues have begun appearing on the region's go-go *bolsas*, as economic growth picks up from Tierra del Fuego to Tijuana. For example, Mickey Schleien, Morgan Stanley & Co.'s Latin American equity re-

THE WORLD'S BOURSES: MOST BEAT THE U.S.

	Price-earnings ratio	Percent change since Dec. 31*	
		In local currency	In U.S. dollars
HONG KONG	16	43%	44%
MEXICO	15	23	20
MALAYSIA	17	2	10
FRANCE	17	13	9
SWEDEN	23	13	9
BRITAIN	17	8	6
GERMANY	16	11	6
SINGAPORE	16	3	3
JAPAN	39	-22	-23
U.S.	21	—	-0.8

*Through June 6

DATA: BARCLAYS DE ZOEETE WEDD SECURITIES LTD.

search director, favors Souza Cruz, Brazil's leading cigarette maker. With low production costs and 85% of the local market, it is benefiting tremendously from the government's recent move to scrap price controls on its products. Schleien also likes Ferrum, an Argentine maker of toilets and other plumbing fixtures. "With the resurgence of the economy, there will be a construction boom," Schleien says. "Ferrum is a pure play on Argentina itself."

Housing-related issues are also winning converts in Asian markets. Although political strife has roiled Bangkok's stock market, Bailard, Biehl & Kaiser's Holbrook still favors Land & House, a fast-growing Thai residential property developer. And falling interest rates in Singapore are gaining a new following for the country's leading banks, Development Bank of Singapore and Oversea-Chinese Banking.

As for Japan, some fund managers have begun to edge back into the Tokyo market, where the Nikkei has stabilized recently at around 18,000 amid tentative signs of an economic turnaround. Stock-

pickers favor Daiwa House, a big home-builder. Meanwhile, Patrick Gifford, director of London's Fleming Investment Management Ltd., has been buying shares in electronics maker Matsushita and retailer Ito-Yokado in hopes of "significantly" higher profits next year.

STILL SKITTISH. But Jeffrey Bahrenburg, Merrill Lynch, Pierce, Fenner & Smith Inc.'s chief analyst in Tokyo, cautions that the Japanese market still is highly vulnerable to the vagaries of the country's troubled economy. Noting that stock prices continue falling for such leading industry groups as technology, food, and consumer goods, Bahrenburg counsels staying away until the Bank of Japan cuts interest rates further, perhaps by late summer. For now, he concedes, "there really isn't a story to play."

That may be true for Japan. But on many other bourses, the stories—and the action—are spreading as signs of a global economic recovery become more manifest. If the U.S. market is gasping for breath, as many pros think, it may be time for American investors to turn their attention offshore.

By William Glasgall in Zurich, with Ted Holden in Tokyo and Elizabeth Weiner in New York

YOU CAN'T IGNITE A RALLY WITHOUT A SPARK

Interest rates will probably decline too gradually to give much life to the bond market



The bond market hasn't shown a lot of pizzazz in 1992's first half and probably won't show too much in the second half, either. Thanks to low inflation and a sluggish recovery, interest rates will likely edge downward in coming months (chart), but not enough to ignite a new bond rally.

While rates typically rise during a recovery, this time may be different. The 30-year Treasury bond began 1992 at 7.3%, then backed up to a 7.75%-to-8.25% range, where it has remained. Yet many bond strategists believe inflation will stay so subdued that long-term rates should drift lower by the fourth quarter—from 7.8% now for the long bond to 7.5% and perhaps go lower in 1993. "There's subnormal job creation in this recovery, and the idea of an election-year tax cut has fizzled," says Roger M. Kubyrych, manager of Henry Kaufman & Co., a New York money-management firm. The only potential action from Washington is another easing by the Federal Reserve, although it probably will leave well enough alone for now.

How does an investor play such a market? Classically, the advice is to head toward longer maturities when rates are decreasing. Locking in higher yields now should pay off handsomely, especially if rates keep on falling in 1993. "I'd hate to miss this opportunity," says Arthur A. Micheletti, senior vice-president at Bailard, Biehl & Kaiser Inc. in San Mateo, Calif. The trick, he argues, is not to be misled by temporary upward gyrations in rates.

ON THE MEND. As an alternative to Treasuries, municipal bonds are getting more attention. Falling revenues for issuers and rising defaults during the recession have dimmed munis' primary allure: exemption from federal and often local taxes. But this situation is on the mend. In the first quarter, for instance, there

were only 22 defaults—one-third the level for 1991's initial three months. This year through the end of May, the market was up 2.38%, compared with 12.14% for 1991, measured by the Lehman Brothers Municipal Bond Index.

Strengthening state and local balance

ance of investment-grade corporates, improving corporate profits. That should attract more investors to corporate bonds instead of government bonds, says Thomas J. Sowanick, manager of taxable-bond strategy at Merrill Lynch & Co., who predicts corporates will outperform governments for the rest of the year. Low rates boosted corporate returns 18.2% in 1991, according to the Merrill Lynch Corporate Bond Master Index. Through June 8 of this year, they were up 2.38%. With the average corporate bond coupon paying 8.9%, the market should furnish a total return of 10% to 10% for 1992, Merrill's Sowanick estimates.

For bond returns, junk is the head of the class, with an average high-yield mutual fund delivering a total return of 10.2% for the year to date (page 100). Junk has probably peaked.

Like the rest of the debt market, mortgage-backed bonds have slowed this year. They were up 2.24% through the end of May compared with 15.64% in 1991, according to the Salomon Brothers Mortgage Index. The market was roiled by 1991's high prepayment rate, thanks to a surge of mortgage refinancings brought on by lower rates. The current consensus is that prepayments have peaked and will decline rapidly. This means fewer bonds will be called, which forces investors to reinvest at current, lower yields.

All the above scenarios, of course, can be scrapped if unforeseen events occur—such as a stalemated three-way Presidential contest being thrown into the House of Representatives. For now, though, the outlook is serene. "There's nothing to upset the market," says Wayne Wong, a managing director at New York's Marinvest Inc. Bond investors had better hope so.

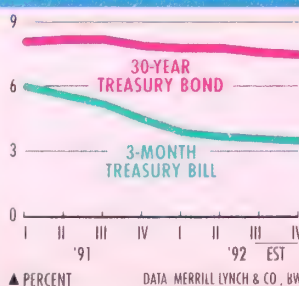
By Larry Light, Leah Nathans Spiro, New York



sheets are helping the market, but that's not yet reflected in many muni credit ratings. Example: Standard & Poor's Corp. rates Massachusetts' bonds BBB, the lowest of any state, yet prices are climbing. "The bonds are trading more like an A than a BBB," says William W. Fish, muni research manager at Donaldson, Lufkin & Jenrette Securities Corp. And fortunately, the muni supply is ample: New issues should hit \$200 billion this year, matching the record set in 1986.

Lower rates also brought record issu-

INTEREST RATES: LOW AND HEADED LOWER



At Japan Airlines, all of our flights originate from the USA.



We have over 100 flights a day to most of the major business centers around the world. Yet, before a single plane can leave the ground, it must make its inaugural flight from right here in the United States.

That's because for over twenty years, Japan Airlines has purchased more

Boeing 747s than any other carrier. In fact, JAL has taken delivery of over eighty 747s, keeping our fleet of airplanes one of the youngest in the sky.

So while our planes end up traveling to the four corners of the globe, we're proud that they all start out in one place.

JAL
Japan Airlines

A WORLD OF COMFORT.

FROM SENSATIONAL TO PRETTY DARN GOOD

Junk bonds settle down after months of sparkling gains. But an 11% coupon is nothing to sneeze at



After last year's spectacular 83% increase, the high-flying junk bond market has subsided to more reasonable gains. Junk returned a nifty 9.8%

through the end of May, as measured by the First Boston High Yield Index. But don't count on this year's gains to continue. Although the current average junk coupon is 11%, yielding 12.1%, price deterioration during the second half of the year could knock off a few percentage points.

Until now, junk returns have been fueled mainly by price appreciation, as the market recovered from a stampede away from junk caused by the collapse of Drexel Burnham Lambert Inc., the market's chief booster. The market seems too richly valued for the rebound to continue. The average junk bond is now selling for 97¢ on the dollar, compared to 65¢ in January, 1991. The current 12.1% average yield on junk is down from 12.9% in December, 1991.

NICE ICING. A 12.1% yield is nothing to scoff at, however, and that should remain safe. "As long as the economy does not deteriorate and interest rates remain relatively stable, the coupon is probably a good indication of what one could reasonably expect for the rest of the year," says Margaret L. Eagle, who manages Fidelity Investments' Advisor High-Yield and Spartan High-Income funds. These nice yields might help junk to continue to outperform both stocks and bonds (chart).

healthy sign is the resurgence of the new-issue market, which is approaching mid-1980s' peaks. Some \$14 billion in new junk was issued in the first five months of the year, up from an anemic \$10 billion in 1991 as a whole. Most issuers have been taking advantage of lower rates to refinance their debt. Investors in these issues are enjoying extra gains resulting from onetime "consent fees," provisions in offerings, typically 3% of the total issue, that are paid to bondholders when companies need to waive their debt covenants to refinance. "It's nice little icing on the cake," says Michael McNamara, who manages \$4 billion in high-yield mutual funds for Kemper Financial Services. Also adding icing is the growing number of companies selling junk for the first time. Some such issues sport relatively lofty coupons—in the 12% range.

Though default is always a risk when

investing in junk, many of the bigger losers have already been flushed out. Defaults and troubled exchange offers fell to \$3 billion in the first quarter of 1992, vs. \$7 billion last year, Salomon Brothers Inc. estimates. The best evidence of portfolio managers' optimism is that a number are fully invested. Fidelity's Eagle is only 4% in cash.

BULLS, BEARS, PIGS. Yet some skeptics feel the junk market is overvalued, and a market decline this year could wipe out the gains from junk yields. "There are the bulls, the bears, and the pigs," says Joseph C. Bencivenga, co-head of research at Salomon Brothers. "Mutual fund investors should be wary. They have had tremendous returns and were very astute by buying early. The situation has reversed itself, and at best high yield bonds are fairly valued."

Bencivenga is not alone. Mariel C. Clemensen, high-yield research director

at Lehman Brothers Inc., expects the market to decline 4% to 5% and the coupon to deliver about 6% during the rest of the year, for a total 1992 return of 10% to 12%. "We continue to expect a weak second half," she says.

Longer term, will credit quality improve and the new-issue market cranked up again, junk could settle back to its historical return of 4 to 5 points above Treasuries. Says Lehman's Clemensen: "We are now getting back to a much more normal period." But this year, bulls, bears, and pigs would agree on one thing: Junk can't repeat its performance of the past 18 months. Compared to yields offered by banks and money funds, junk still looks tempting.

By Leah Nathans Spiro in New York

JUNK FUNDS OUTSTRIP STOCKS AND BONDS

Name	Net assets* Millions	1992** Total return
DEAN WITTER HIGH-YIELD SECURITIES	\$440	20.74%
NATIONAL BOND	467	19.76
FIDELITY CAPITAL & INCOME	1,472	18.95
ADVANTAGE HIGH-YIELD BOND	36	15.43
SUNAMERICA INCOME PLUS	19	14.59
SUNAMERICA HIGH-YIELD	21	14.28
FIDELITY ADVISOR HIGH-YIELD	61	14.26
KEYSTONE AMERICA HIGH-YIELD BOND	71	13.67
MAINSTAY HIGH-YIELD CORPORATE BOND	358	13.56
FIDELITY SPARTAN HIGH-INCOME	349	13.34
AVERAGE HIGH-YIELD BOND FUND		10.22
Average equity fund		0.48
Average taxable bond fund		1.13

*As of Mar. 31

**Through May 31

DATA: MORNINGSTAR INC.





S H A R P T H I N K I N G

To stay ahead in business,
you've got to think ahead.

You need Sharp Thinking.

Sharp Thinking created the
world's first desktop color fax.
And made Sharp #1 in fax.

It brought you the incredible
PC-6881 full-color notebook
computer that builds in
tomorrow's technology today.

It led to advanced copiers
like the award-winning, high
volume Master Series.

"WHAT YOUR BUSINESS NEEDS TODAY IS SHARP THINKING."

And our most powerful
Wizard® Electronic Organizer.

That's Sharp Thinking. It's
behind all our products. And
behind the Sharp National
Account Program (SNAP) that
offers large-volume accounts
total service and support.

So shouldn't your business
be thinking Sharp?

For more information call:

1-800-8E-SHARP

SHARP
FROM SHARP MINDS
COME SHARP PRODUCTS™

©1992 Sharp Electronics Corporation.

WORKING SYSTEMS • CALCULATORS • CASH REGISTERS • COLOR SCANNERS • COMPUTERS • COPIERS • FACSIMILE • LASER PRINTERS • TELEPHONES • VIDEO CAMERAS • VIDEO DECKS • VIDEO EQUIPMENT • VIDEO RECORDERS • VIDEO TAPES • VIDEO VIEWERS • VIDEO WORKSTATIONS • VIDEO ZOOM LENSES • VIDEO ZOOM LENSES • VIDEO ZOOM LENSES

THE PLACE TO BE THIS YEAR IS WHERE YOU WEREN'T LAST YEAR

The highfliers of 1991 were this year's laggards. But so far in '92, some sleepers are leading the pack.



Investors poured record amounts of money into equity mutual funds in the first half of the year. Unfortunately, very little of it flowed back in

the way of returns.

The Standard & Poor's 500-stock index moved up less than half a percentage point, and equity funds on average rose just half that. But while returns were lackluster, dramatic shifts took place among the mutual-fund leaders. Indeed, the mutual-fund strategy that paid off in the first half was, by and large, simply not being in 1991's big winners. Last year's high-flying favorites, health and biotechnology funds, were roundly pummeled. This year's winners, spurred by glimmerings of a recovery, turned out to be funds specializing in battered-down auto, savings and loan, and regional bank stocks.

NUTS AND BOLTS. Check out, for instance, the leading equity fund through June 5: Fidelity Select Automotive (page 106). "I don't think anybody would have selected Fidelity Select Automotive as a big winner last September," says Sheldon Jacobs, editor of *The No-Load Fund Investor* newsletter. Yet the fund boasted a 35.82% return for the first five months, a payoff on its strategy of buying into auto manufacturers and their suppliers. Assets mushroomed from \$2.2 million to \$122 million. Meanwhile, Fidelity's sector funds, specializing in biotechnology and health care stocks fell from 1991's list of leaders to 1992's list of laggards.

The most significant change in the market was the movement away from last year's go-go growth funds and into the more prosaic "value" funds,

which stress undervalued issues with strong fundamentals. Funds such as the \$39 million Heartland Value Fund, with its focus on neglected small-cap stocks, helped bump aggressive growth funds such as the \$1.8 billion Twentieth Century Ultra Investors fund, which tends to focus on health care and technology companies, off the BUSINESS WEEK list of leading funds. "More mundane companies are getting more attention, because that's where the pop in earnings is appearing," says William J. Nasgovitz, president of Heartland Advisors Inc. Heartland, which rose 17.75% to capture 11th place, invests in, among other things, grocery chains and companies that make industrial fasteners.

Not all the market leaders were dethroned. Among industry groups, financial-services funds continue to lead the pack. Even so, their 12.37% return fell

far below the 35.5% increase for the first five months of 1991, when these depressed stocks had more room to run.

But the rankings of most industry groups shifted significantly. Income funds, the eighth-best stock-fund group at yearend, rose to second place with a 4.24% return. Funds that invest in natural resources, which fell 2.20% in the first quarter, ended the first five months as the third-best-performing industry group, with a total return of 4.2%. Health care funds, top performers in 1991, took a turn for the worse, sinking 12.79% for the year to date. Technology funds, also among 1991's stellar performers, fell 1.34%, and funds targeting precious metals slid 4.32%.

LATIN POETRY. Internationally, funds that invested in Japan also took a hit, as the Tokyo stock market plunged and the Japanese economy sank toward

recession. But overall, foreign stock funds outperformed diversified U.S. equity funds, gaining 3.25%, while diversified U.S. funds slid 0.30%. European funds moved up for much of the first half, gaining 7.08%. Funds specializing in Latin America did especially well. Global Latin America Growth Fund, the fifth-best fund year-to-date, saw solid returns from investments in Mexico and Chile add up to a 21.9% total return. The \$152 billion fund, which closed to new investors just 40 months after inception, will remain closed until 1993.

In the fixed-income universe, junk-bond funds maintained their 1991 lead. Although off to a torrid 1991 pace, they outperformed equity funds, racking up an 11.01% total return. Dean Witter Health Yield Securities fund took the lead for the second year in a row, with a

HOW STOCK-FUND GROUPS FARED

Group	Total return*
Financial	12.37%
Income	4.24
Natural resources	4.21
International	3.25
Specialty-miscellaneous	3.24
Equity-income	3.21
Growth-income	1.12
Asset allocation	0.83
Balanced	0.37
Utilities	0.24
Diversified U.S. equity	-0.30
Growth	-1.15
Small company	-1.25
Technology	-1.34
Maximum growth	-1.85
Precious metals	-4.32
Health care	-12.79

All equity funds	0.25%
S&P 500 INDEX	0.37%

* Appreciation plus reinvested dividends and capital gains, Jan. 1 through June 5

DATA: MORNINGSTAR INC.



HOW THE LARGEST FUNDS PERFORMED

Fund	Total return*
Windsor	10.49%
Fidelity Puritan	8.33
Fidelity Equity-Income	7.43
Washington Mutual Investors	2.66
American Mutual	2.61
Wellington	2.43
Fidelity Magellan	1.99
Investment Company of America	0.41
Vanguard Index 500	0.37
Twentieth Century Select Investors	-7.57

* Appreciation plus reinvested dividends and capital gains, Jan. 1 through June 5

DATA: MORNINGSTAR INC.

74% return. Further price appreciation may not be in the cards for junk bonds, but "the yields are such that, even if you just get the yield, it's not a bad deal," notes Jacobs.

While bond funds specializing in high-yield securities sizzled, however, the bulk of the fixed-income funds fizzled. Tax-free municipal bond funds weighed in with a 2.43% return, and taxable fixed-income funds rose a measly 1.28%. Government-bond funds performed even worse, returning just 0.92% for the year-date. "The lower your quality, the better the performance this year, which is exactly as one might expect when interest rates rise on the outlook of an improving economy," says John Rekenhiser, editor of the guide *Morningstar Mutual Funds*.

MEUPPANCE. Most of the top-performing funds on BW's list come from the well-known mutual-fund houses, but a few unfamiliar names always appear. This year, the \$2.5 million Sherman Fund captured fourth place with a 30% total return. Portfolio manager J. Walter Sherman, whose family owns one-third of the fund, invests only in undervalued, unrecognized stocks—just a few of them right now. Sherman, who sees inflation and interest rates picking up in the next three to six months, has 25% of the fund's assets in Benguet Corp., a Philippine company that is a play on gold and copper.

While the tiny and volatile Sherman Fund enjoys its day in the sun, the \$7 billion Fidelity Magellan Fund has moved from its top-performing spot in the first quarter. Its 1.99% return ranked seventh among the largest funds placed 452nd of the 1,231 equity mutual funds tracked by Morningstar Inc. The \$8.1 billion Windsor Fund, with its focus on long-term growth and low price-earnings ratios, snagged the No. 1 spot among the megafunds, and ranked 10th overall. None of the largest funds came near their year-ago returns, but the top eight outperformed the S&P 500. The Vanguard Index 500, which tracks the S&P 500, matched the index' anemic 0.37% return.

Whether the action, or lack thereof, in mutual funds over the past five months vividly illustrates the truism that "following the market, the greatest investment doesn't always lead to the greatest results," says Kurt Brouwer, president of Brouwer & Janachowski, a San Francisco-based investment advisory firm. Brouwer's definition of a winner in today's uncertain market: "whoever hangs on to their money."

By Suzanne Woolley in New York

Full Business Week Mutual Fund Scoreboard, published monthly, is available on diskette by monthly or yearly subscription. For information, write to P.O. Box 100, Fort Lee, N.J. 07024, or call 1-800-553-3575.

EQUITY FUNDS: FIRST-HALF STARS AND STRAGGLERS

LEADERS		LAGGARDS	
Fund	Total return*	Fund	Total return*
Fidelity Select Automotive	35.82%	Lexington Strategic Investments	-29.59%
Fidelity Select Savings & Loan	28.04	Schild Value	-26.28
Fidelity Select Regional Banks	25.53	Oppenheimer Global Bio-Tech	-24.12
Sherman Dean	24.30	USAA Mutual Aggressive Growth	-20.60
Morgan Stanley Asian Equity	23.63	Fidelity Select Biotechnology	-18.75
Freedom Regional Bank B	21.79	Vanguard Intl. Equity Index Pacific	-17.83
G.T. Global Latin America Growth	21.18	Hartwell Emerging Growth	-17.53
Fidelity Select Financial Services	19.63	DFA Japanese Small Company	-17.28
Newport Tiger	19.45	Fidelity Select Health Care	-17.18
Merrill Lynch Phoenix A	18.18	Financial Strategic Health Sciences	-17.11
Heartland Value	17.75	Dean Witter Developing Growth Secs.	-16.64
Merrill Lynch Latin America B	17.15	G.T. Japan Growth	-16.40
Fidelity Select Industrial Technology	17.05	G.T. Global Health Care	-15.75
Fidelity Select Industrial Materials	16.66	Retirement Planning Equity	-14.38
Parnassus	16.53	Alger Small Capitalization	-14.20
Pioneer Capital Growth	16.29	Morgan Stanley Emerging Growth	-14.10
Fidelity Capital Appreciation	16.21	Investors Research	-14.07
Oakmark	15.90	Putnam Health Sciences	-14.01
American Heritage	14.71	Fidelity Select Medical Delivery	-13.93
PaineWebber Reg. Financial Growth A	14.66	Pacific Horizon Aggressive Growth	-13.76
Fidelity Select Software & Computer	14.41	United Services Gold Shares	-13.45
Equity Strategies	14.26	Scudder Development	-13.16
T. Rowe Price New Asia	14.21	Emblem Earnings Momentum Equity	-13.01
Berwyn	14.19	Charter Capital Blue Chip Growth	-12.91
Twentieth Century International Equity	14.08	Mutual of Omaha Growth	-12.80
Babson Enterprise	13.88	Japan	-12.72
Fidelity Low-Priced Stock	13.79	Steadman Ocean, Technology & Growth	-12.68
Skyline Special Equities	13.73	Shearson Special Equities	-12.27
Ivy International	13.73	Twentieth Century Ultra Investors	-12.23
Gintel Capital Appreciation	13.58	Flag Investors Emerging Growth	-12.19
Fidelity Select Construction/Housing	13.19	Shearson Small Capitalization	-12.17
Alliance New Europe A	12.86	United Science & Energy	-12.13
Bull & Bear Special Equities	12.85	American Investors Growth	-12.10
Merrill Lynch Developing Capital Markets	12.49	Dreyfus Growth Opportunity	-11.94
DFA United Kingdom Small Company	12.39	Value Line Special Situations	-11.76
Kemper Diversified Income	12.37	Value Line Leveraged Growth Investors	-11.66
First Eagle Fund of America	12.32	Twentieth Century Giftrust Investors	-11.34
Templeton Global Opportunities	12.30	Dean Witter Capital Growth Securities	-11.22
Kemper Inv. Portfolio Divers. Income	12.29	Robertson Stephens Emerging Growth	-11.16
Gintel	12.27	Fortis Advantage Capital Appreciation	-11.06
Fidelity Value	11.93	MFS Lifetime Managed Sectors	-11.02
Harbor International	11.91	Lexington Technical Strategy	-10.96
Goldman Sachs Capital Growth	11.87	Parkstone Small Capitalization	-10.88
Gabelli Small Cap Growth	11.55	Sit "New Beginning" Growth	-10.87
Franklin Income	11.52	Fortis Growth	-10.81
Lindner	11.43	Mass. Financial Emerging Growth	-10.77
Mutual Beacon	11.09	Eaton Vance Special Equities	-10.71
Mutual Qualified	10.91	MFS Managed Sectors	-10.70
Olympic Equity-Income	10.86	Independence Cap. Total Return Growth	-10.59
Bartlett Capital Bartlett Value Intl.	10.79	Twentieth Century Vista Investors	-10.50

S&P 500* 0.37%

ALL-EQUITY AVERAGE* 0.25%

*Appreciation plus reinvestment of dividends Jan. 1 through June 5

DATA: MORNINGSTAR INC.

PROPERTY VALUES START CLIMBING OUT OF THEIR BLACK HOLE

Homes are selling in most parts of the country, and new commercial activity is at least conceivable



For the past couple of years, real estate has been the very definition of a lousy investment. Home sales sank, and prices did, too. Commercial va-

cancies spiraled, and developers went bankrupt. Yet the pervasive gloom seems to be abating. Housing is inching back, helped by the overdue economic recovery and low mortgage rates. Hopes are gathering that even the moribund commercial sector may begin a gradual revival within a couple of years.

For home buyers, recent mortgage-rate declines are heaven-sent. Despite a small rise since their January bottom of 8.3% nationally, rates still are at their lowest in 14 years, 8.6%. Most savants believe they will stay at that level into the fall, perhaps climbing a bit at year-end as the recovery takes hold.

Rate stability will aid those who haven't already refinanced their existing double-digit mortgages. The rule of thumb is to do this only if rates are two percentage points below what the borrower is paying now. Nevertheless, there's a downside: Refinancing involves expenses such as legal fees and lender's points, which can be steep, often 2% to 3% of the loan.

BUYER'S MARKET. Home sales should gather force as better economic news comes in. By next year, the National Association of Realtors expects sales to be back to 1988's level (chart). The big weakness in the current market is more expensive houses. "Buyers want to be sure their jobs are O.K. before they move up," says Richard J. Loughlin, chief executive officer of Century 21 Real Estate Corp. Sales in the Northeast and California, hardest hit by the recession, likely will lag behind the rest of the country.

Despite a steady increase in sales volume, housing remains a buyer's market. Prices actually continue to fall on both coasts. Nationally, price increases for existing homes are running just slightly ahead of inflation. "That and lower rates are helping a lot



of people afford homes who couldn't before," says John A. Tuccillo, the Realtors' chief economist.

For the time being, commercial real estate is deep in the pits. Downtown office-vacancy rates rose from 18.8% at year-end, 1991, to 19.3% in 1992's first quarter, according to Cushman & Wakefield, the brokerage firm. Overeager developers simply built too much space in the 1980s.

LONG WAIT. When and where will it turn come? Salomon Brothers Inc. predicts that the suburbs will be the first to recover because construction has almost completely vanished there, so supply will more easily catch up with demand. Here's the kicker: This will take at least two years. In the cities, which require larger office projects, some construction is still going forward since it was committed to years ago. Better times downtown may be five years distant.

For commercial tenants, these are good old days. Rents are slumping. Nervous landlords are offering enticements to lease-signers, such as two years of free rent and free space improvement—partitions, electrical outlets, etc.

For investors, the cheapest and least risky way to sink money into property is through real estate investment trusts. REITs own buildings or hold mortgages—and these tend to be in solid properties with good cash flows.

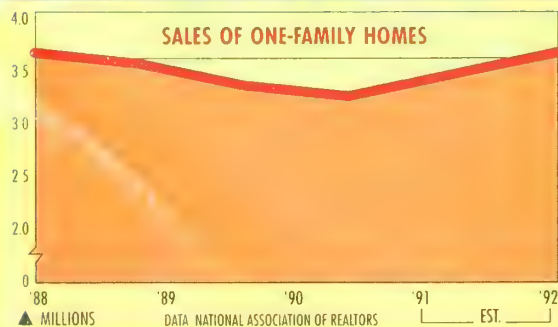
After a lousy showing in 1990 and a sterling one in 1991, REITs have done so thus far this year, although they remain slightly ahead of the Standard

Poor's 500-stock index in total return: 1.2%, vs. 0.5% for the first four months. Among the leaders is Weingarten Realty Investors, which specializes in shopping centers in the Southwest. Since the beginning of 1991, its stock has jumped 50%, to 34.

Happy tales such as this are the exception in the bloody world of real estate. Says Century 21's Loughlin: "Recovery in the industry is not something you want to write home about." At least people are finally talking about one.

By Larry Light in New York

HOUSING EDGES BACK UP





Comfort Defined.

Defined Funds are unit investment trusts that can help define comfort.
Especially if your definition includes money and the time to enjoy it. These are diversified portfolios of stocks or bonds. You know what you're investing in before you buy. And you can get started for about \$1,000. Ask your financial professional for more information. Call 1-800-422-9001, ext. 358.

Merrill Lynch

hearson Lehman Brothers • Prudential Securities • Dean Witter • PaineWebber
See prospectus containing more complete information on any Defined Fund, including all charges and expenses, is available. Read the prospectus carefully before investing.

THE BEST OF 1992 SO FAR



DESPITE A WARM WINTER, HEATING OIL IS A HOT COMMODITY



THIS RECENT NYSE ARRIVAL HAS SHOT UP 136% THIS YEAR



BEST NYSE STOCK

BEST AMEX STOCK

Children everywhere spend blissful hours twirling the dials of Etch A Sketch. Well, it seems that adults have

inspired by dramatically improved sales and earnings, investors have bid up this Bryan (Ohio) company's stock, and its any American Stock Exchange stock

margins. Also, adding the company's per-
Writer, a new magnetic drawing toy.

BEST OTC STOCK

Big winner in the slot machines. Among over-the-counter stocks, a single cher-
for investors. Shares of this electronic switching device maker have gained

year at \$5 or more.

Investors pulling for Cherry are l-
ting on a cyclical improvement in
mand for electronic equipment. Che-
is also a wager on a weak dollar.
of its sales are from abroad.

BEST STOCK GROUP

offering up the Model T in basic bl-
The giant U.S. carmakers are the

easily the best-performing stock gro-
my will keep improving and that Det-
is finally making headway against Je-

seem to feel that what's good for Ger-
for their portfolios.

BEST MUTUAL-FUND MANAGER

top of the ba-



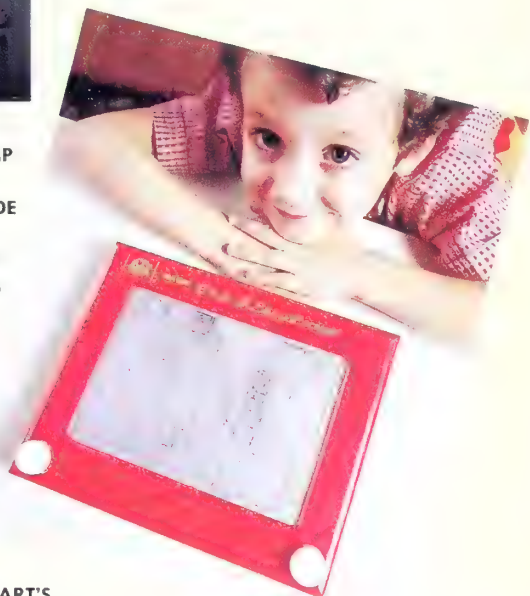
**STORS ARE
ING BIG THAT
OIT IS FINALLY
ING ON
ANESE RIVALS**



**STEVE WYMER
RODE FIDELITY'S
SELECT
AUTOMOTIVE
PORTFOLIO
TO THE TOP**



**OTC CHAMP
CHERRY
CORP. MADE
FRUITFUL
GAINS FOR
INVESTORS**



**OHIO ART'S
CLASSIC ETCH A
SKETCH DRAWS
HIGH MARKS**

mutual-fund managers—his fund is 5.8% in the year to date—by buying heavily into auto-related stocks. Of course, as manager of the Fidelity Select Automotive Portfolio, he didn't have much choice.

It has been almost as much of a gala for auto suppliers and allied companies such as Goodyear Tire & Rubber, the fund's biggest holding, as it has for Big Three. "At the start of the year, there were very low expectations for the autos," says Wymer, "and now, the autos seem to be anticipating a decent up in car sales this year."

BOND-FUND MANAGER

In the Dean Witter High Yield Secured fund declined 40% in 1990, making it the worst-performing bond fund of the year, hardy investors hung on. Those optimistic souls have finally made whole. Under the management of Peter Avelar, who came on board in December, 1990—and isn't talking to the press, by corporate fiat—the fund this year gained 20.7% through March 30. That makes it the best bond

fund through that date, and that—added to a 67% gain in 1991—means investors "have just barely recovered from their 1990 losses," says Amy Arnott, an analyst at Morningstar Inc.

About one-third of the fund's assets are in the junkiest of junk, rated CCC or worse. So buying into it now makes sense only if you are willing to bear the risk of another 40% loss.

BEST COMMODITY-FUND MANAGER

In recent years, trend-following—technical analysis of price and volume patterns—has become *de rigueur* among managers of commodity funds. Trouble is, everybody follows trends—and there are times, such as the first half of 1992, when commodity-fund managers resemble a line of sheep walking off a cliff. Well, Ralph G. Adams has strayed from the flock, and it's no coincidence that, through the end of April, his Lora Trading Co. in Somerset, N.J., had returned 23.4% on the \$10.5 million he manages for nine different funds.

Adams mainly follows the fundamentals of the commodity markets. "You

can't just sit on a trend," he says. His biggest winners have been cotton and the dollar. It helps that his holdings are relatively small potatoes in the commodity biz.

BEST COMMODITIES FUTURE

Heating oil and winter temperatures usually move in opposite directions. But this year, despite a very warm winter, heating oil has been the hottest commodity, rising 25%, to around 60¢ a gallon.

Expecting a mild winter, refiners let distillate fuel stocks fall to a 10-year low. Then, when the economy started bouncing back, unexpectedly high diesel-fuel consumption ate into distillate supplies. "To the extent that we're looking for higher crude oil prices, heating oil has additional room to move," says Michael S. Rothman, a Merrill Lynch & Co. energy futures analyst. So if 1992's price action is any guide, it won't take another crisis in the Middle East to put a smile on the faces of oil traders.

By Gary Weiss in New York, with David Greising in Chicago and Suzanne Woolley in New York

HOT PICKS FOR DAREDEVIL INVESTORS

From biotechs to hair salons, these stocks may bring out the speculative streak in you

THE LONG VIEW OF CONSECO



To the shorts, Consecoco was last year's demon. Pros who sold short this financial-services holding company in 1991 lost big bucks as the

stock soared from 10 a share (adjusted for splits) to 40 in March. Over the past few months, however, the shorts have been able to extract some revenge as the stock has fallen to 23.

At this new price level, the longs are bracing for another battle with the shorts—a firefight the longs expect to win. More than ever, the longs believe that Consecoco, which specializes in acquiring and running life- and health-insurance companies, will hit its earnings targets.

One big investor who has been buying shares recently thinks the stock will rebound to its old high in the 40s "as it becomes clear that the company will do better than expected."

The longs don't believe that Consecoco is facing a slowdown, noting that record first-quarter results showed operating earnings jumping to 90¢ from 50¢ a year ago. For all of 1992, the company expects to top analysts' operating earnings expectations of \$4 a share, vs. 1991's \$2.89. And it could earn \$6 next year, says one pro.

The longs also reject the shorts' claim that the company's accounting practices "are questionable." One big Consecoco bull, Ray Dirks of RAS Securities, says the stock's decline since May is due to rumors that a weekly publication will soon come out with a "negative" article on Consecoco. The story, he says, will suggest as "improper" Consecoco's practice of including the profits from its stake in a partnership in its consolidated earnings statement.

Chairman and CEO Steve Hilbert says the company's accounting practices are "accurate and proper." He adds: "Consecoco's earnings momentum

CONSECO: IS THERE LIFE AFTER THE BIG FALL?



is strong." He describes the recent selling pressure as "inappropriate."

Two investor lawsuits were filed in the U.S. District Court in Indianapolis on May 22 alleging that the company misrepresented its business, finances, and prospects in disclosures with the Securities & Exchange Commission. Consecoco says the suits are "without merit" and are a part of the shorts' campaign against the company.

ONE BIOTECH STALKS AN OLD DISEASE...

Badly burned by the persistent decline of the biotechs, players are leaving the field in droves. But some daring pros are now buying into companies that promise new drugs for some old diseases. Take SciClone Pharmaceuticals. Its stock, which went public at 7½ on Mar. 17, is now 9¼.

SciClone has exclusive marketing rights to a drug called Thymosin Alpha 1 in Asia, where 90% of the population infected with hepatitis B (about 280 million people worldwide), resides. Thymosin is currently undergoing final trials to test its effectiveness in treating hepatitis B.

Earlier trials "resulted in favorable response in 75% of patients with chronic active hepatitis B, with little side effects or relapses," says Chairman and CEO Tom Moore.

In Italy, recent test results showed Thymosin twice as effective as alpha interferon, a Schering-Plough drug already in the market for hepatitis B.

Taiwan, where more than 3 million people (20% of the population) are hepatitis-B virus carriers, is one of SciClone's largest market opportunities, says Moore. He figures trials will start there in October. SciClone has entered into an alliance with an Asian investor group to market Thymosin in Taiwan and Japan. And it has also formed a joint marketing venture with the Singapore government.

Franklin Berger, an analyst at J. Seppenthal, Lyon & Ross, the investment house that took SciClone public, sees the company becoming profitable by 1994 on revenues of about \$20 million. In 1995, he expects earnings of \$2 a share on sales of \$75 million. Berger anticipates the stock rising to 20 in the next two years.

...WHILE A SECOND JOINS THE AIDS FIGHT

Another biotech that the small money likes is Future Medicine Products. "It's a uniquely attractive stock for the daring investors," says Kazi Hasan, a senior vice president at Ray Dirks Research. Selling at about 3 a share, the stock could easily double when it gets FDA approval for the products it has under development, he says.

One of them is an organic compound developed at the Albert Einstein College of Medicine in New York City, which the company says destroys the HIV-1 virus outside the human body. This could be used, for example, to eliminate the virus from blood plasma. The company says studies done by Ira Arye Rubinstein, a professor and director of AIDS research at Einstein,

showed that treatment of blood products with the compound has the potential to significantly lower the risk of HIV infection to patients receiving donated blood.

Future Medical jointly owns the patent on the compound with Einstein College and has exclusive marketing rights. The company has signed an agreement with Biodynamics, a testing company, to conduct animal testing necessary to meet FDA requirements for commercializing the product, says Steve Cantor, president of Future Medical. If approved, the company plans to produce condoms and medical gloves treated with the compound as a means of preventing the spread of HIV-1, the virus that causes AIDS. The company thinks that it will get approval next year.

BIOTOWN MAY GET TOP SOURCE MOVING

When Top Source got on the American Stock Exchange's new Emerging Company marketplace, a trading venue for companies too small to qualify for regular New York listing, its Chairman and CEO, Stuart Landow, expected the stock to attract investor attention. That has yet to happen. Instead, shares of this developer of automotive technology and products have fallen from 4 a share in March to about 2½ on June 10. But to some pros, this decline is a "buying opportunity."

They point out that Top Source has already succeeded in attracting the attention of General Motors and Chrysler.

Landow says GM's Service Parts Operations unit will soon begin marketing the patented Top Source Overhead Speaker System as a dealer-installed option for 15 of its vehicle lines, including Chevy Blazer, Olds Bravada, Jimmy, and several GM vans. The sound system will be marketed to GM dealers under the name of GM Good-Noise Overhead Speaker System.

For its part, Chrysler first introduced Top Source's overhead sound system in its Jeep Wranglers in 1990. Landow says 31% of the Wrangler models are equipped with Top Source's overhead system. This year, Chrysler is putting the sound system as an option in its Jeep Cherokee vehicles.

Top Source is now at the beginning of a "dramatic revenue expansion," says analyst Dennis Roth of Chesapeake Securities Research in Towson, Md. Although the company has yet to make a profit, Roth expects the jump in reve-



nues next year—to between \$7 million and \$10 million vs. last year's \$1.4 million—should pull in 12¢ to 30¢ a share, vs. an expected loss this year.

Roth's estimates don't include the company's other products that could come to market next year. Among them is the ARC (accelerated restraint curve) safety seat that was tested in May by a major carmaker, which Landow declined to identify. Industry sources say, however, that it was Chrysler. The technology for the product was licensed exclusively by its developer, the Massachusetts Institute of Technology, to Top Source. The product, designed for use with the air bag, met federal safety standards, says Landow.

TIME TO JOIN THE PRICE CLUB?

Although Price Co., the large operator of cash-and-carry membership wholesale clubs, is a relatively big-cap stock, a lot of investors now see it fraught with risk. In just one day—on Apr. 2—Price lost a stunning 26% of its value, to 35 a share, when the company reported sharply lower second-quarter earnings. Now, the stock is trading at 32, more than 50% off its high of 65 in August, 1991.

But money manager Bill Harnisch, president of Forstmann-Leff Associates, which manages some \$4 billion, is high on Price. Although he usually shuns speculative situations, he has been snapping up shares. Harnisch is willing to take the risk because he's convinced that Price will get back on track and become the growth stock that it once was.

The company concedes that earnings were hurt by stiff competition, particu-

larly in California, where almost half of its 77 stores are located. And analysts figure that 1992 will be Price's first no-growth year since it went public in 1980.

Harnisch is undaunted, however. He sees earnings accelerating to \$3 a share next year, vs. an estimated \$2.47 this year. "This time earnings will surprise the Street on the upside," insists Harnisch. Investors won't lose, even if his forecast goes awry, he says. "If I'm wrong and Price fails to recover, the company will be a takeover target—at 70 a share."

In the past, explains Harnisch, there has been talk about bigger companies in the industry being interested in acquiring Price. Now that Price's stock has dropped sharply, he says, the company becomes an even more tempting target.

SNIP SOME LOCKS AND LOCK IN SHARES

Like many people, Street pros go to hair salons for a haircut or hair styling. But of late, some savvy players see the haircutting business as a great place to invest. Haircuts, they note, are sensitive to the economic cycle. So with the economy starting to bounce, haircutting is bound to grow.

Haircutting is a big, if fragmented, industry: a cool \$30 billion business in the U.S., where there are some 160,000 hair salons. One stock investors are buying: Regis, the largest hair-salon operator with 1,141 salons in 50 states, located primarily in shopping malls.

"The pickup in mall traffic should also lift the flow of business in Regis salons," says analyst Mike Reilly of Piper, Jaffray & Hopwood. He expects operating earnings to be flat this year. But for the year ending June 30, 1993, he figures, earnings will jump to 70¢ a share, vs. 46¢ in fiscal 1992.

Reilly thinks Regis could hit 10 in a year. Regis' stock has fallen from 10 in April to 6 recently. It hit 17 last year right after its initial offering in June, 1991, at 13. One thing that soured Regis' stock is a lawsuit filed in May against Regis by MEI Diversified, in which Regis has a 20% stake. Regis President Paul Finkelstein expects an out-of-court settlement.

Finkelstein says the company's new growth area will be Russia, where he expects to open 100 shops. Several big U.S. companies, he says, want to do joint ventures with Regis in Russia. "We expect to be the McDonald's of haircutting in Russia."

WHY NASA WILL HAVE TO COME DOWN TO EARTH

The folks at Mission Control face big budget constraints now that Russia's rocketeers are hurting

Dominating the lobby of the mission-control center in Kaliningrad outside Moscow is a heroic-size mosaic of cosmonaut Yuri Gagarin, the first man in space. But today at the sprawling complex, memories of the Soviet Union's early triumphs ring hollow in the long corridors. Morale is low. Money is scarce. And nearly everything in the space program is on the block, a victim of the economic crisis gripping Russia. "The situation is deteriorating," laments Victor M. Surikov, who recently resigned as deputy director of the Research Institute of Machine Building, part of the surviving Russian space program. "We are going down."

After a decades-long rivalry, you might think there would be rejoicing at the National Aeronautics & Space Administration in Washington. Instead, NASA faces a crisis of its own. Unlike its Russian counterpart, NASA isn't threatened with collapse. But the agency has been hobbled by a lack of strong leadership and the astronomical cost of its programs, which runs \$14 billion this fiscal year. New NASA Administrator Daniel S. Goldin, who took over on Apr. 1, vows to rein in a bureaucracy that has let costs soar: "I came here," he says, "to do things faster and cheaper."

MOTHBALLED. Cheaper, for sure. For more than 30 years, the cold war rivalry helped keep cash flowing. But with that rationale gone, both Washington and Moscow face a new era of limits. In fact, some experts believe Moscow, which has already mothballed a planned space shuttle,

may soon be forced to shut down its six-year-old Mir space station, ending its manned space program. "I would not be surprised," says Roald Z. Sagdeev, former director of the Space Research Institute in Moscow and now a physics professor at the University of Maryland.

Meanwhile, NASA is flying into big trouble on Capitol Hill over its 1993 budget. The agency wants \$15 billion to fund the planned space station Freedom and a broad range of research. Already, the House appropriations subcommittee plans to cut NASA's request by \$300 million. And more trouble is brewing.

Freedom, centerpiece of NASA's plans

for the late 1990s, is under attack as orbiting Taj Mahal. "It doesn't even close to being a priority when one considers the staggering problems the nation faces," declares Senator Dan Bumpers (D-Ark.), a Senate Appropriations Committee member who wants to terminate the project. "The space station faces a substantial threat this year adds a senior congressional staffer. "It won't give it a 45% chance of getting killed." "It won't help that NASA will soon have to tell Congress of a projected cost overrun of about \$200 million by McDonnell Douglas Corp., which has a \$3.3 billion prime contract for the basic structure of the space station.

LOW ORBIT. All told, Freedom will cost at least \$118 billion to build and maintain over the next 10 years, according to the General Accounting Office. Under the current scenario, construction will begin in late 1993. NASA has scheduled 12 space shuttle flights, at about \$500 million each, to ferry materials into low earth orbit, where spacewalking astronauts and construction workers will assemble the station. Even after much redesign, NASA estimates it will take 432 hours of space walks to complete the project by 2000.

A manned space station has long been a cherished goal of NASA. Ronald Reagan gave the green light in 1984, and the dream has been kept alive by trimming the program, delaying unmanned projects such as the advanced X-ray satellite for astrophysics research and virtually ignoring the true long-term costs of the project. But Goldin, who formerly ran TV Inc.'s satellite business

NASA'S SPENDING PLANS

Fiscal 1993 budget proposal

	Millions of dollars
Space Station Freedom	\$2,250
Planetary missions and other exploration	586
Space shuttle and other launch systems	5,412
Tracking and data acquisition	921
Research and program management	1,660
Construction of facilities	319
Other space science and aerodynamics programs	4,010

WILLIAMS HOWE SPACE VISION WORK



GOLDIN: "WE NEED MAN IN SPACE"



The new HP PaintJet XL300 lets you make a splash without getting soaked.

At last. A printer with fantastic color and a brilliantly low price. \$3,495.

Vivid color has never been so affordable. Hewlett-Packard introduces the PaintJet XL300 inkjet printer. Now you can get laser-quality color printing for about half of what you'd expect to pay. Only \$3,495.*

With access to millions of colors, you'll be amazed at the output you can create. Rich, vibrant, professional color graphics. Crisp, clear, laser-quality text. And you can print in a wide variety of sizes, on a choice of media that includes plain or glossy paper and transparencies.

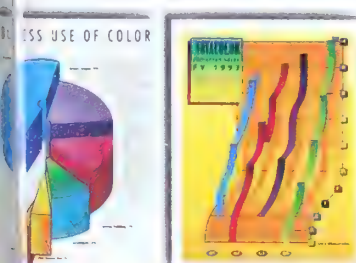
As versatile as it is practical, the PaintJet XL300 switches effort-

lessly between PCs and Macintosh. And, with HP LaserJet printer compatibility built right in, the PaintJet XL300 lets you run all the popular software.

Now that there's a color printer as practical as the PaintJet XL300, maybe it's time you took the plunge into color. Call **1-800-752-0900, Ext. 3160** for a free print sample and the name of the authorized HP dealer nearest you.



**HEWLETT
PACKARD**



Science & Technology

stunned the agency in May by ordering a broad review of its operations. He said he was "terribly concerned" about the cost of major programs, which the GAO estimates will cost \$92 billion over the next five years.

The space station's high cost would sharply reduce NASA's ability to begin new programs and missions, such as increased monitoring of the environment. Arguing that NASA can't fund everything, Goldin set up "Blue" and "Red" assessment teams to evaluate the pros and cons of each major program. He has indicated a preference to kill projects that don't measure up rather than stretch them out. His target is a 30% overall budget cut, beginning in 1994. An engineer by training, Goldin plans to move managers from Washington headquarters to field offices, where they can keep closer tabs on contractors.

Whether this new cost-consciousness will placate congressional critics and help keep the Freedom project funded isn't clear. Last year, only heavy White House lobbying kept money flowing. To preserve the station, NASA agreed to delay work on a shuttle replacement and starve other projects. But this time around, in the wake of the Los Angeles riots, Administration lobbyists are hibernating. "The silence is deafening," says one Democratic congressional aide.

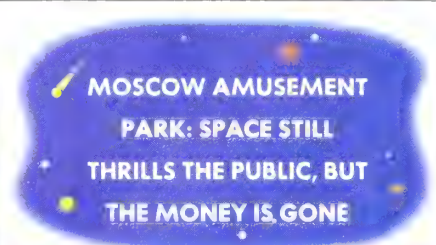
FLAWED LAB. One might expect the scientific community to back what NASA has long billed as a huge research-and-development project, but not so. The prestigious National Research Council's Space Studies Board concluded last year that Freedom could not be supported on scientific grounds. As designed, the station lacks the facilities needed for serious research in space biology or medicine and is flawed as a lab for materials research and other studies in near-weightless conditions, says Robert F. Sekerka, a physics professor at Carnegie Mellon University who chaired the board's committee on microgravity research.

Scientists say their delicate microgravity experiments would be better done on a cheaper, unmanned orbiting lab—where they wouldn't be disrupted by the activities of astronauts. A spacecraft for humans is also far more costly because of the life-support systems, radiation shielding, and other gear. Still, Goldin defends the station for its presumed contribution to the manned space effort. "We need man in space," he says, "to find out just what happens to humans in zero gravity for a year or two."

Such long space flights are an area where NASA has lagged behind the Soviets. Cosmonauts have stayed in Mir for up to a year. But it has been so poorly equipped as to yield little scientific un-

derstanding, aside from evidence that humans can't easily withstand weightless conditions for long periods.

And after decades when space was a top priority, Moscow is now grappling with a new reality. With inflation skyrocketing, the new Russian space agency, headed by Yuri N. Koptev, is hobbling along on a quarter-by-quarter budget that is sharply lower than before the Soviet Union broke apart. As a result, Moscow is scrambling to sell technology and space services. The Russians are peddling flights on Mir for \$10 million to \$15 million each—though that's not enough to cover costs. And Mir, which was launched in 1986 and has cir-



cled the globe nearly 35,000 times, is badly in need of repair. Cosmonauts complain that they must devote 80% of their time to keeping it running, and jokingly call themselves "janitors in a drum." That isn't likely to change: Moscow has scrapped plans to build a replacement station, dubbed Mir 2.

At the mid-June summit in Washington, the U.S. is expected to propose greater cooperation in space. It may lift current restrictions and permit the Russians to launch an American-built, internationally owned maritime communications satellite (INMARSAT). And NASA plans to award a \$1 million contract to NPO Energiya, part of the Russian space program. The purpose: to study possible U.S. purchases of Russian space technology, including a three-crew-member reusable Soyuz 2 spacecraft that could

serve as a "lifeboat" for an emergency evacuation of the U.S. space station and an automated docking system.

So far, however, Moscow's space bazaar hasn't yielded much cash. The U.S. Defense Dept. did agree to buy two T-1000 space reactors for \$13 million. And Glavkosmos, the former Soviet space agency, recently sold a cryogenic rocket engine to the Indian space program. But that move backfired. The U.S. put sanctions on Glavkosmos, citing international export controls designed to prevent sales of ballistic-missile technology (BW—June 15). Russian officials say they didn't violate the controls and that the U.S. simply wants to ban them from the fiercely competitive commercial rocket business. "There are those in the State Dept. who want to liquidate our space program," says Nikolai A. Semyonov, head of the international department at Glavkosmos. "What Russia produces is more competitive—American rockets are expensive. So, it's much better for the U.S. to abolish something than to have fair competition."

'LIKE BEGGARS.' The Russians now are looking to Europe for help in salvaging their program. Budget woes recently prompted the European Space Agency (ESA) to scale back its plans for a manned space program and try to save money by using Russian technology and services. In January, the ESA and Russia's Industry Ministry began talks to see what help Moscow could provide Europe's planned space shuttle, the Hermes project. "We could save a lot of money using Russia's hypersonic wind tunnels" for aerodynamic research, says Jörg E. Feustel-Büchl, the ESA's director of space-transportation systems. But these are small steps when survival of the Russian space effort is at stake. Moscow, where space rides are more popular in amusement parks than in Parliament, officials are resigned to a dim future. "We are like beggars looking at expensive things," says Surikov, who left the space program to set up a company that finds private investors for military-conversion programs.

In Washington, election-year politics may keep the space station going a while longer. Still, Goldin recently told NASA employees that the agency needs fundamental change: "America demands that we produce more for less, or NASA will drift into irrelevancy." Indeed, this year's budget fight in Congress may force the agency to focus more on earth-oriented programs—and scale back such grandiose dreams as colonizing the moon or taking a stroll on Mars.

By Seth Payne in Washington, with Deborah Stead in Moscow and Jonathan Levine in Paris

405 OF THE FORTUNE 500[®] FICHE FOR SAVINGS WITH ANACOMP.

The more successful the company, the more information it creates. So when it comes time to store and retrieve this valuable information, more than 80% of the FORTUNE 500 rely on Anacomp micrographics for a solution that lands them major savings.

JUST WHAT IS FICHE?

Each Anacomp fiche is a 4"x 6" sheet of microfilm that holds up to 700 pages of information. In most cases, fiche can be retrieved and used more quickly than competing media such as magnetic tape and optical disc. Most important, savings in the cost of paper, storage space, mailing costs, and manpower make fiche far and away the most cost-effective way to store and retrieve data.

As a cost-effective alternative to paper-based information management systems, Anacomp's micrographics is unsurpassed. Here are some specific examples of savings netted by Anacomp customers:

- An 80% savings on the cost of labor
- A 99% savings on the cost of mailing
- A 90% savings on the cost of materials
- A 99% savings on the cost of storage.

When we are invited to "Anacomp your company," we do a thorough audit of the way your business manages its information. Without exception, we can provide precise cost savings in real dollars over specific time frames.

Such dramatic savings, especially in today's business environment, have helped Anacomp become a member of the FORTUNE 500.

Let us "Anacomp your company." To find out how, contact P. Lang Lowrey, SVP, Anacomp, Inc., 3060 Peachtree Road, N.W., Atlanta, GA 30305, or call (404)262-2667.

ANACOMP
The Image Of The Future



You're Carrying 4 Tons Of Explosives And People Are Shooting At You.

No problem. You're in an F/A-18 Hornet.

In Operation Desert Storm, two McDonnell

Douglas F/A-18s were able to engage and shoot

down two enemy MiGs, even while loaded

down with several tons of bombs

and missiles. Then the

F/A-18 pilots

went

on to

complete their

real mission: Bombing an

Iraqi airfield. The F/A-18 Hornet is just

one in a long line of McDonnell Douglas

success stories—from the dependable Delta

Rocket to the fearsome Apache. It's this

record of proven performers that has made

us a world leader in aerospace technology.

MCDONNELL DOUGLAS

Performance Above And Beyond.

© 1992 McDonnell Douglas Corporation



Developments to Watch

EDITED BY FLEUR TEMPLETON

ENDING LEFTOVER PIZZAS DOWN TO THE FARM



Cows may soon be chewing a lot more pizza and pretzels in the cud if researchers at Pennsylvania State University have their way. Scientists there have developed a computer program to hook up livestock owners with food processors who produce millions of tons of food wastes or by-products.

Penn State animal scientists Harold Harpster

Gabriella Varga analyzed the nutritional value of more than 50 waste products, including chocolate eggs, pizza, and canned vegetables, past their shelf lives. When mixed with additional feed, many of these products turned out to be good nutrient sources for livestock. The computer program calculates the lowest-cost ration plan and displays a map showing the availability of a particular by-product and transportation costs. So far, the system has been designed only for Pennsylvania, but the researchers plan on eventually taking it to neighboring states. Food processors support the idea, says Harpster, because they're pinched by rising waste disposal costs.

EARLY-WARNING TEST FOR SICK GUMS

Open your mouth—and stick out your finger. Someday, that may be the instruction you hear from your dentist, thanks to researchers at the University of Texas Health Science Center at San Antonio. Stanley C. Holt, a professor of periodontics, and his colleagues have developed a finger-prick blood test that they claim can detect whether a patient is likely to suffer from periodontal disease.

The goal is to offer preventive care, such as extra cleanings, before such signs as toothaches and bleeding gums show up. At that stage, the disease may have progressed to the point where surgery or root cleaning are the only alternatives. The laboratory test measures the level of antibodies to bacteria detected as causing gum disease. It employs an enzyme test that produces a color reaction: various shades of blue, depending on the concentration of antibodies present in the blood sample.

Orbit Inc. in Canton, Mass., bought the rights to market the test in March. The company says it should be available by year-end at about \$20 to dentists for test kits and lab services.

IS LITHIUM COCKTAIL GOULD JUICE UP ELECTRIC CARS

In the race toward battery-powered cars, an Italian research team is developing a battery that could store 10 times as much power as a lead battery the same size. The key is substituting a new, denser, lithium-based polymer for the liquid electrolyte in conventional lead batteries.

Developed by Eniricerche, the research arm of Italy's state-owned energy group Ente Nazionale Idrocarburi (ENI), the

solid polymer consists of chains of lithium and other lightweight molecules that have molecular "strings" hanging from them. Lithium ions conduct electricity between negative and positive poles of a battery by passing from string to string—like Tarzan swinging through the jungle on vines, says Eniricerche Managing Director Franco Forlani.

Forlani estimates that the new battery could power a car for 185 miles without recharging. That's more than four times the 43 miles a lead battery can muster. Eventually, the car's range may stretch to 435 miles. And unlike similar polymers developed by other researchers, this one conducts at subfreezing temperatures. The polymer is being patented, though Forlani says development of a battery is still some years away.

WHY SMOKERS' ARTERIES HARDEN SO MUCH FASTER

Smoking has been linked to all kinds of ills, including cancer, atherosclerosis, and heart disease. Now, researchers have demonstrated for the first time that tobacco smoke delays the clearance of cholesterol and dietary fat particles from the blood. The preliminary results link smoking and a Western diet—one that's high in animal fat—to increased incidence of atherosclerosis.

In the experiment, researchers at the Veterans Administration Medical Center in San Francisco exposed rats to an atmosphere containing 10% tobacco smoke. The result, says Dr. Joseph H. Rapp, a vascular surgeon and member of the VA team, was that these animals' livers were slower in clearing fat particles from the blood. And the longer dietary fat and cholesterol remain in the circulation, the more likely they are to be deposited on arteries. These deposits are one of the main contributors to atherosclerosis.

The next step will be to investigate these effects in other animals and to find out how the cholesterol and fat particles actually enter the artery wall, says Rapp.

JAPAN IS ALREADY PONDERING HDTV'S SUCCESSOR

The Japanese once had great hopes for high-definition TV. But sales have been disappointing—and their technology has failed to become a world standard. Now, Japan is trying again with "ultra-definition television," or UDTV, which has more than twice the resolution of HDTV. Telecom giant NTT confirms it is discussing a \$110 million UDTV joint



venture with software powerhouse ASCII and national broadcaster NHK, which developed Japan's HDTV system.

The partners hope to develop high-density image processing chips, powerful compression algorithms, and transmission equipment to shoot the signals over fiber-optic cable—all within seven years beginning in 1994. To avoid repeating the HDTV fiasco, the three want to sign up U.S. and European players from the outset and agree on a global UDTV standard. That won't help Japanese companies recover the billions invested in HDTV or help consumers make a decision. Why buy an HDTV today when you could get a UDTV in 2001?

THE PAPERLESS OFFICE-SEEKER

This election may be won on the electronic stump

Roy H. Kaplan's advice doesn't come cheap. The New Jersey computer consultant normally charges clients \$125 an hour. But lately, Kaplan, president of JK Group Inc. in Princeton, is giving most of his time to a new customer, gratis. Kaplan, who saw first-hand how inefficient the government could be during a stint as an agent for the Internal Revenue Service, is now spending 40 hours a week figuring out how to use state-of-the-art computer technology to further Ross Perot's undeclared Presidential campaign.

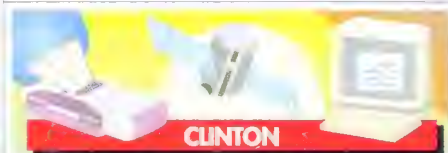
Around the country, hundreds of Roy Kaplans have created a high-tech revolution that is applying the most sophisticated techniques of computer-based marketing to the tradition-bound world of Presidential politics. Media advisers may still command big-buck contracts, but, increasingly, computer nerds and cybergeeks are redefining the ways candidates communicate with voters. From computer bulletin boards to 800 numbers, political partisans are using the latest technologies to reach out and touch individual voters in their living rooms.

And while both parties are taking advantage of these new technologies,



Perot, the hard-charging computer services billionaire, may be the perfect technopol for the Information Age. Already, he has purchased optical disks from Washington-based Aristotle Industries containing the names and addresses of every registered voter in New York and Texas, and he is considering spending nearly \$400,000 to buy the complete set of 76 disks. And he may buy commercial consumer data bases that could, for example, tell him if an individual voter is a gun enthusiast or carries a high level of debt.

His computer system allows him to gather detailed information about the



► An 800 number allows voters to hear messages from the candidate, ask questions, receive copies of his economic plan, and donate money

► A campaign satellite makes it possible for Clinton to grant live interviews to reporters across the country

► Using new fax technology, Clinton can give his 'spin' on breaking events to key Democrats within 10 minutes

► Clinton is sending his positions on issues to various computer bulletin boards

► The campaign has purchased television time in several states for unheard 'town hall' meetings with voters

more than 2 million callers to his 800 number. And while the Perot campaign declines immediate comment, it is said to be planning an electronic national convention featuring satellite hookups to remote locations and interactive communications with voters. "Ross Perot is the first Presidential candidate to fully understand the computer revolution and use every available channel of communication to speak to voters," says Democratic consultant Brian Lunde.

Most of this technology has been around for a while, but recent design breakthroughs and price reductions have created a leap in accessibility. Perhaps more important is a change in attitude. Business has used two-way satellite teleconferencing for years, but political handlers have shunned it, preferring to shape their message through 30-second TV spots and pithy sound bites.

No longer. Campaign strategists for all three White House hopefuls are drooling over high-tech gadgetry. Bill Clinton and George Bush, who have agreed to a spending ceiling in exchange for taxpayer funds, can't fit every t

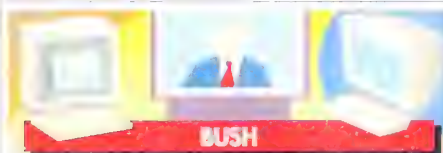


► Perot has bought optical disks with the names and addresses of every registered voter in New York and Texas, and may buy the whole set of disks. By checking data against consumer data bases, he can target voters more precisely than Democrats or Republicans

► The campaign is likely to buy huge blocks of TV time, on cable or networks, to permit the candidate to talk about issues, take questions from voters, or broadcast campaign events

► Perot is holding fewer traditional political rallies and photo opportunities, more multicity speeches via satellite telecommunications. He may even hold an electronic convention

DATA: BW



► An extensive computerized file gives the Bush campaign the finest negative research operation in politics

► An intricate computer system swiftly sends reaction comments to designated spokespeople around the country

► A special telecommunications room in the White House allows Bush, at a moment's notice, to go on any TV station in the country

► The campaign's sophisticated data base on the populace allows it to tailor its message precisely to narrowly targeted groups

they covet within their strict budget. Multibillionaire Perot, who is paying his campaign out of his own pocket, has no such limitations. As his research director, Frank Luntz, puts it: "The only limit I have is my own creativity."

The major-party candidates are doing what they can, though. Clinton tapped into bulletin boards to deliver speeches, issue papers, receive feedback and engage in keyboard chitchat with hackers from Hackensack, N.J., to Silicon Valley. Who is his bulletin board whiz? Jay Johnston, a 15-year-old Lincoln Rock boy who has been hacking since he was 8. Among his accomplishments: making Clinton's speeches available on a computer bulletin board for the dead-end 'BETTER TOYS.' The Bush campaign is slouch when it comes to computer technology, either. Thanks largely to the GOP's largess, the Republican National Committee has devised some of the political software around: programs

FOR EVERY YOU, THERE'S A FUJITSU.



Cellular technology.

When you feel like
showing off, it's the
perfect status symbol.

When you're chasing a
new client, it's the
ultimate necessity. And
no portable cellular
phone makes staying in
touch as convenient as
the Pocket Commander
Stylus™ from Fujitsu.

With available
accessories such as



a hands-free car kit,
3-watt power booster,
Pocket Data Interface,
rapid charger and
the innovative Power
Pack Plus alkaline
battery pack, you
can always be on
call. For the pocket
cellular phone that's
sure to breed success,
look to Fujitsu.

For every you,
there's a Fujitsu.



1 - 8 0 0 - 9 5 5 - 9 9 2 6

FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

is simple. We know once you try IONET, you'll be a customer for life.

So what have you got to lose? Call
1 800 795 0014 toll free now for the name
of your nearest Sitka 10NET dealer. Because
getting anything else would be a waste of

1-800-795-0014



Perot spent \$30,000 to give each state office use of the most sophisticated software on the market, Aristotle Indus-

By Richard S. Dunham in Dallas
Mark Lewyn in Washington

A satellite hookup lets 'you reach mass audiences without anyone intervening'—not even the press

Now Business Week Brings the Latest Mutual Fund Performance Statistics to Your Computer for 25% Less!

Announcing a 25% New Subscriber Savings on BusinessWeek Mutual Fund Scoreboard Diskettes for Financial Planners, Investors, and Brokers!

Business Week offers you a time-saving, intelligent way to narrow down the vast field of equity and fixed income mutual funds into the chosen few that have what you need in an investment fund.

Now, for a limited time, new subscribers can have all of the benefits of the Mutual Fund Scoreboard Diskettes at 25% savings off the regular 6 month subscription price.

Performance Data on Over 1000 Equity and Fixed Income Mutual Funds is delivered right to your IBM-compatible PC. You can manipulate, analyze, and compare this data in any combination you may need.



Business Week's Exclusive Fund Ratings are displayed on your computer, along with over 25 key performance factors, including: Sales Charge, Assets in Millions of Dollars, Beta Factor for Risk Level, etc.

Powerful Data Management Software is built in. With just a few keystrokes, this menu-driven program narrows the field to funds that meet your specific investment criteria.

Organize Your Selected Data in Lotus 1-2-3 or any of several word processing or graphics package that accept ASCII files, and you can generate your own tailor-made

charts or databases, showing the information that means the most to you in making an investment. The program is also integrated for use with Fund Master TC from Time Trend Software and Centerpiece Portfolio Management Software from Performance Technologies. Source data is supplied by Morningstar, Inc.

Receive Regularly Updated Statistics and do your own analysis so you can make the best possible investments. This special 25% new subscriber savings brings you the newest data every month for the next six months.

Chart the Future At Home Or the Office, because the BusinessWeek Mutual Fund Scoreboard Diskettes require only 256K memory and DOS version 2.1 or higher. You don't need special software, a hard disk, mouse, modem, graphics board, or even a color monitor!

Self-Contained, Menu-Driven, Current. Your subscription puts all of the investment information you need right at your fingertips. To order, FAX or mail the attached coupon or call Toll Free 1-800-553-3575.

BusinessWeek Mutual Fund Scoreboard Diskettes

Yes, please enter my 6 month trial subscription-at a 25% savings-as checked below:

Equity Funds only	Fixed Income Funds only	Both Editions
☐ 6 mos. @ \$112.50	☐ 6 mos. @ \$112.50	☐ 6 mos. @ \$149.95
☐ 3 1/2" Diskette ☐ 5 1/4" Diskette	☐ 3 1/2" Diskette ☐ 5 1/4" Diskette	☐ 3 1/2" Diskette ☐ 5 1/4" Diskette

Please add \$18.00 shipping and handling (\$3.00 per month for six months). Residents please add 7% sales tax.

Name _____ Daytime Phone _____
 Title _____ Company _____
 Address _____
 City _____ State _____ Zip _____

Check enclosed payable to BusinessWeek Mutual Fund Scoreboard
 Bill my company (Company Letterhead or Purchase Order required)
 Charge my ☐ MasterCard ☐ VISA ☐ AmEx ☐ Diners Club
 Card No. _____

Expiration Date _____ Signature _____
 Please send more information.

Mail or fax this coupon to BusinessWeek Mutual Fund Scoreboard Diskette, Dept. HB22
 P.O. Box 1597 Suite C, 22nd Floor P.O. Box 13
 185 Bridge Plaza North Yoko Industrial Building Great Missenden
 Suite 302 10 Ka Yip Street, Chaiwan Bucks, HP16 0DQ
 Fort Lee, New Jersey 07024 HONG KONG ENGLAND
 U.S.A. Tel: 800-553-3575 Tel: 852 5 8978447 Tel: 44-494-891050
 Fax: 201 461-9808 Fax: 852 5 598246 Fax: 44-494-890757

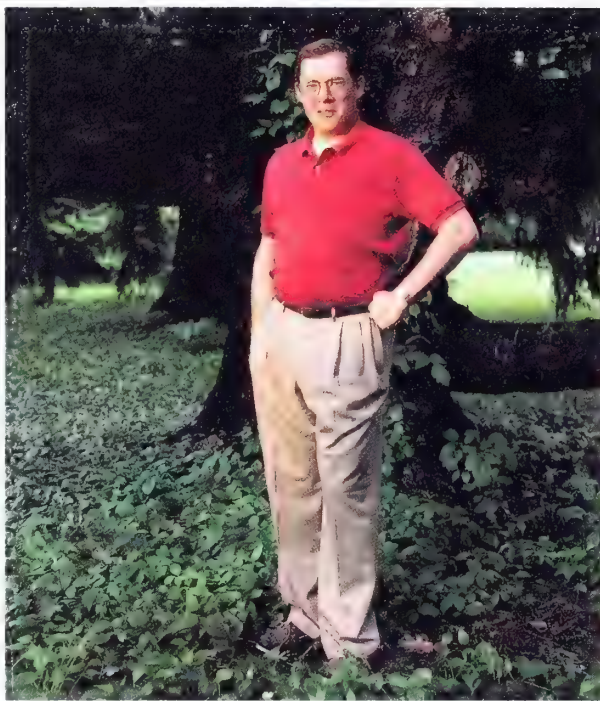
THE NEW, NEW THINKING AT XEROX

It's trying to act more like a startup as it moves into digital copiers

In March, CEO Paul A. Allaire and six top Xerox Corp. executives took personality tests to gauge how well they interact. Then they holed up for a few days in a Connecticut monastery to get to know one another better. This summer, they plan to sail the waters of the Chesapeake Bay for a three-day Outward Bound adventure.

A New Age approach to corporate togetherness? Like, yeah. But in Xerox' case, it may well be worth a shot. This exemplar of Corporate America, based in Stamford, Conn., could use some new thinking. Advances in manufacturing processes improved the quality of its products and customer service, helping it capture the Malcolm Baldrige National Quality Award in 1989. Yet earnings from continuing operations stayed flat at \$555 million last year. And Xerox' share of the U.S. copier market, while rebounding from 10% in 1985 to 18% in 1991, remains well behind Canon Inc.'s 27%, according to market researcher Dataquest Inc.

To be sure, Xerox has done its share of soul-searching and reorganizing before. But now the effort is taking on greater urgency as the company's core business—machines for creating and re-



FOR CEO ALLAIRE, THE SECOND RESTRUCTURING IN THREE YEARS

producing office documents—moves from traditional optics to digital electronics. Rather than simply using lenses to copy a page, a Xerox machine will scan pages electronically, send faxes, and use a laser to print computer text and graphics. All of which its Japanese rivals are moving quickly to master.

In theory, at least, Xerox is in a position to fend off the Japanese—as well as U.S.-based competitors. For 20 years, its researchers have looked at just about every possible way of turning digital data into marks on paper. But, as Allaire

concedes, the company has had a poor track record in getting new technologies to market fast. A 26-year Xerox veteran who became CEO in 1990, Allaire saw the company almost lose the copier market to Canon and Ricoh Co. in the 1970s. Scientists invented personal computers, but Xerox fumbled in the market. They also invented laser printers, but Hewlett-Packard Co. leads there. And recently, Xerox let Canon get a big head start in color copiers.

HONED ALONE. Hence, Allaire's big push to get his management team in sync. His goal is to make Xerox run more like a high-tech startup than a lumbering behemoth. To change that, in 1991, the company set up the stand-alone Xsoft software division to test new ways of speeding innovations to market (page 121). Last February, Xsoft became the model for a major reorganization of Xerox' operations into nine product divisions. One unit handles desktop copiers, for instance, while another develops the Docutech line of advanced scanner-copier-printer-fax machines.

In the process, Xerox has traded its old hierarchy for a matrix of nearly independent businesses. "People have to give up the icons of the past in this company," says William F. Buehler, senior vice-president for corporate resources. Allaire took a big swat at the end of last year, ordering some 200 layoffs and eliminating layers of management. In lieu of a president, Allaire named a team of five executives who mainly act as advisers to the new product divisions (table). Three geographical units sell, install, and service Xerox machines. "We're trying to radically increase the clock speed of the corporation [while keeping] the advantages of a large corporation," says Allaire.

Allaire has been trying to speed things up for two years, but he has also countered some unfortunate obstacles. In 1990, he hired William C. Lowe, former head of IBM's PC division, to share his computer expertise as executive vice-president for development. But Lowe left after a year to run Gulfstream Aerospace Corp. In April, Xerox hired Vittorio Casati

XEROX' NEW LOOK

Xerox has reorganized into nine product divisions and three geographical sales divisions, all reporting to CEO Paul Allaire and five senior executives. The product divisions fall into three categories

DATA COMP. REPORTS

COPIERS

PERSONAL DOCUMENT PRODUCTS

Retail, direct-mail, and catalog sales of copiers and other gear

OFFICE DOCUMENT PRODUCTS

High-end copiers, including digital and color models; faxes

DOCUMENT PRODUCTION SYSTEMS

Multipurpose duplicators

PRINTERS

PRINTING SYSTEMS Mainframe-attached laser printers

OFFICE DOCUMENT SYSTEMS

Office laser printers

XEROX ENGINEERING SYSTEMS

Systems for preparing engineering drawings

SOFTWARE AND SERVICES

XSOFT Software packages for desktop computers

XEROX BUSINESS SERVICES "Outsources" document activities at customer offices

ADVANCED OFFICE DOCUMENT SERVICES Software to connect faxes to PCs

highly regarded for marketing computer at Olivetti and American Telephone Telegraph Co., to head a large chunk of the \$14 billion document-processing business. But he returned to Italy in 1987, gravely ill.

Repeated reorganizations have many analysts wondering how long this "new Xerox" will last. An insider joke goes: "You don't like the weather, just wait months." Indeed, this is Xerox' restructuring in only three years. "This is like scene 1, take 33," says analyst Ajit Kapoor, at Meta Group, a market-research house in Westport, Conn.

RIGHT JOB. The big worry is that Xerox won't prevail in digital copiers, despite technical advantage. Its Docutech is to a good start, with 1,000 units sold in the first year, which exceeded internal goals. But the market for the 18½-foot-wide machine, starting at \$220,000, may be limited. "They're selling a higher-performance machine when for most users a lower-performance machine might be adequate," says Angele G. Boyd, an analyst with International Data Corp. Travelers Corp. bought six and cut annual printing costs almost in half, to \$20 million, says Edward D. Arnold, director of print shop. But he's having a tough time persuading other Travelers units to Docutechs. "It costs a lot, it's big, it's complicated," he says.

The more important battle in digital printing will be in the midrange market, where at \$9 billion annually is twice the volume of the high end. Xerox says it will go out cheaper digital systems this year. But if it doesn't move fast, it may lose precious ground. The first Docutech was a year behind schedule, and its lack of networking capability, due next year, will be out this month. In Japan, meanwhile, Canon sells a digital copier that Haruo Murase, executive president of Canon USA Inc., says connects to faxes, printers, and computers—just as Docutech plans to do. He says the Canon copier will go on sale in the U.S. by yearend for about \$50,000. In the high end, Xerox is supreme.

Dataquest analyst Lynn Ritter says the Japanese are creeping up.

Allaire's restructuring works, Xerox will stay ahead. The key job for the Document Production Systems division, for instance, is to crank out those large digital copiers. By 1997, Allaire says, his new product groups can earn double-digit annual revenue growth, up from the sub-10% compound annual rate of the past six years. In 1997, says Peter J. Enderlin, an analyst with Barney, Harris Upham & Co., Xerox should post a 5% rise in income from continuing operations to \$585 million. That's a start, but not the kind of entrepreneurial stuff Allaire dreams of.

By Lisa Driscoll in Stamford, Conn.

THE MODEL FOR XEROX' REFORM IS STILL BEING MOLDED

Legends die hard. A famous Silicon Valley legend is Xerox Corp.'s failure to reap commercial successes from the breakthroughs of its Palo Alto Research Center (PARC). Other companies, notably Apple Computer Inc. with the Macintosh, turned PARC ideas into smash hits. Not Xerox.

A year ago, Xerox management set up the XSoft division to write a happier ending. Now, what began as an experiment in entrepreneurial management has become the model in a major corporate reorganization.

So how's the role model for a new Xerox doing? The 450-employee unit is getting high grades for bringing innovative PARC technology to market. But

Windows, is a \$100 add-on to Microsoft's Windows program, itself derived from PARC's work in the late 1970s. Based on the idea that the screens of heavy users are as cluttered as desks, the package opens Windows up to larger work spaces. Information is put in categories that are displayed as rooms on a computer screen, labeled "schedules," "customers," "monthly reports," or whatever the customer wants.

Both products have received good reviews. But in the six weeks since they went on sale, XSoft has shipped just 10,000 units. "I think they need to spruce up their marketing act," says analyst Krystyna Filistowicz of Dataquest Inc. "They still have too much of the Xerox legacy living with them."

FRESH AIR. XSoft is pushing ahead with plans for a dozen more programs, including a document search-and-retrieval package due out early next year. The common theme: XSoft will build off Xerox's strengths in document management and graphical interfaces.

Meanwhile, XSoft President Dennis W. Andrews is working hard to give his group a sense of urgency that has been missing in much of Xerox. XSoft's small teams have specific product goals, a budget, autonomy—and deadlines. That helped move Rooms, which had languished for several years at PARC, onto store shelves in just 10 months. "In the past, the people at Xerox have been insulated from the rest of the world," says Barry Obrand, sales vice-president. "That's changing."

On June 9, Andrews decided to break the whole division into small teams like those that successfully launched PaperWorks and Rooms. He broke XSoft into six business lines, saying it will make employees "quicker on their feet." He says the reorganization could mean up to 20% fewer jobs by the end of July.

Analysts fret that XSoft remains too much the old plodding Xerox. "They're still a more shielded environment than lots of software companies," says analyst Bill Ablondi of BIS Strategic Decisions. He thinks Xerox' deep pockets may keep XSoft less hungry—or fearful—than its competitors. XSoft executives don't mind the criticism. Says Z Smith, the head software engineer on PaperWorks: "We'd like our competitors to still believe the folklore." The trick will be making sure that inside XSoft, that old Xerox legend is dead.

By Kathy Rebello in Palo Alto, Calif.



ANDREWS SAYS SMALL TEAMS WILL MAKE HIS EMPLOYEES "QUICKER ON THEIR FEET"

its grades for selling the resulting products are so-so. "They have potential," says Steve Hess, executive vice-president of the consulting firm Creative Strategies International Inc. "But they need to reach some milestones."

One milestone was reached in late April when, after rummaging around in the PARC attic, XSoft brought out two software packages for PCs. The \$249 PaperWorks program is based on a PARC technique that represents data with little marks on paper. By faxing a page with the right marks to a computer back home, a traveler can instruct the computer to send a file back via fax. The second package, Rooms for

THE KIOSKS ARE COMING, THE KIOSKS ARE COMING

Touch-screen computers may soon become a megabucks industry

Jon Webb is browsing in suburban San Diego's Parkway Plaza Mall when an unfamiliar contraption catches his eye. "Touch my screen," implores the video monitor in the seven-foot structure wedged between a T-shirt cart and a lottery ticket booth. Intrigued, the bearded 34-year-old places his index finger on the glass. Suddenly, California Governor Pete Wilson appears and talks about the many services Info/California, this audio-video computer, offers: job listings, information on HIV testing, an electronic application for a fishing license, and more. Webb selects data on area beaches. "Cool," he says as he tears off a printout.

Now that nearly everyone is comfortable with automatic teller machines, many businesses and government agencies figure Americans are ready to retrieve information and order products via computer kiosks such as the one Webb used. Housed in wood-and-plastic cabinets and equipped with touch screens and simple menus, they are popping up everywhere—in supermarkets, auto showrooms, malls, and schools (chart). About 59,400 such kiosks are in use in the U.S. today, says market researcher Inteco Corp. But by 1996, Inteco says there will be 2 million, making them more common than gasoline pumps.

FEWER WORKERS. That forecast is based on a new breed of multimedia machines. Unlike the electronic kiosks that have been gathering dust in airports for a decade, these machines have colorful graphics and sound and allow consumers to conduct transactions. From the 15 Info/California kiosks around San Diego and Sacramento, for example, you can order a copy of your birth certificate. One kiosk in riot-torn South Central Los Angeles is helping citizens find community-assistance programs.

The challenge is to make kiosks part of everyday life, not

just a passing fad. When Hawaii tested similar kiosks in 1990, 33 people a day used each machine in the first six months. But since then, use has slowed to about 25 people per day, and the kiosk project is on hold.

California could face the same problem. But Jim Henderson, who is running the pilot project for California's Health & Welfare Agency, says that the state can recoup some of the \$3 million it has spent from transaction fees. Long-term,

kiosks could help the cash-strapped state's bottom line. If hundreds of kiosks are answering routine questions, says, the bureaucracy can function with fewer workers. Six other states may soon launch similar projects.

Businesses are also adopting kiosks. Four music stores in California have installed NoteStations, kiosks that dispense sheet music. A customer uses a touch screen to scan more than 1,000 titles. When one is selected, the score is played and the computer plays a few bars. For \$3.95, the music lover can have the score printed in any key. Music Wer Inc. in Los Gatos, Calif., says it plans to install its kiosks in 1,800 stores.

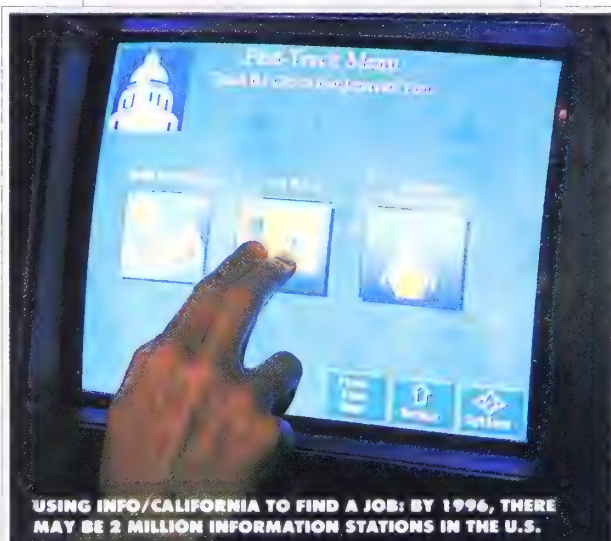
MEMORY EDGE. While kiosks are a fairly small business now—about \$250 million annually—giant IBM is aggressively pursuing it. "We think it can become a multi-hundred-million-dollar business for us," says Linda D'Angelo, manager of consumer multimedia for IBM.

IBM's group builds complete kiosks, including computer, cabinet, speakers, and credit-card reader. And programmers at IBM's Thomas J. Watson Research Center have studied the "human interface" for the masses. The results may be seen on Info/California screens at the 300 kiosks IBM built for Expo '92 in Seville.

If they catch on, kiosks could radically alter service businesses. "They could eventually replace \$6- to \$8-per-hour workers," says Fred W. Gianini, software developer for Man Design Inc. in Providence, who co-developed a line of counter kiosks for Stop & Shop Supermarket Co. Workers don't only memorize a limited amount of product and pricing data, says, but computers can manage torrents of it. In Toronto, for example, Allstate Insurance Co. is selling policies at kiosks in Safeway and Food City stores.

Some folks, no doubt, will miss the human touch of a counter person who gives you a sample of the salami—or an insurance salesman. But a nation pressed for time, kiosks could prove irresistible. To mall-goer Webb: "They're convenient for people who don't want to run all over the place. Instead, you may just be running down to the corner kiosk."

By Evan I. Schwartz, with M. Eng in New York, S. L. Walker in San Diego and D. Cuneo in San Francisco



ASK MR. KIOSK

Information-dispensing touch-screen computers can answer such questions as:

ANY PLUMBERS NEEDED IN BURBANK? In San Diego and Sacramento, citizens can search job listings, order birth certificates, and get health care data

CAN I GET THAT ON PUMPERNICKEL? At supermarket deli counters in New England, shoppers order their favorite sandwiches and cold cuts

WHERE'S THE CAMEROON PAVILION? At Expo '92 in Seville, visitors can use multimedia systems to preview pavilions, find their way, or make reservations

IS THE SUN ROOF EXTRA? At auto shows and at some dealers, tire-kickers get details on new Cadillacs

CAN YOU PLAY MISTY IN F#? At San Francisco music stores, musicians can print out sheet music

FREE INFORMATION FOR READERS OF **BusinessWeek**

Want more information about advertisers in this issue?

If so...

1. Review the list of advertisers below.
2. Circle the corresponding number on the postage-paid reader service card, complete the necessary information and drop in the mail.
3. Or, call toll-free Monday—Friday 8AM—5PM MST:

1-800-345-3550

When prompted, use keypad to enter this control number **8299600***

ANNUAL REPORTS

1. Ameritech

FINANCIAL PRODUCTS AND SERVICES

2. CIGNA Corporation

3. Franklin Fund

4. Merrill Lynch

5. T. Rowe Price
Adjustable Rate U.S.
Government Fund

6. T. Rowe Price
International Stock
Fund

7. The Janus Fund

8. Twentieth Century
Investors, Inc.

9. Van Kampen Merritt

PRODUCTS/SERVICES

10. Advanced Logic
Research

11. Anacomp, Inc.

12. AT&T NETWORK
SYSTEMS

13. Buick Motor Division

14. Canon CJ10 Color
Copier, Printer, Scanner

15. Canon Plain Paper Fax

16. Centel Corporation

17. Delta Airlines

18. Fujitsu Network
Transmission Systems,
Inc.

19. Haworth, Inc.

20. Hewlett-Packard 95LX
Palmtop PC

21. Lexmark Supplies

22. Lexus

23. Manila Hotel

24. McDonnell Douglas
Aircraft Company

25. Minolta Corporation

26. Mita Copystar America

27. Olicom A/S

28. Panafax Plain Paper
Facsimiles

29. Peninsula Group

30. Ricoh Corporation

31. Sharp Electronics Corp.

32. Unisys

33. Yellow Freight System,
Inc.

AREA DEVELOPMENT

34. Fairfax County
Economic Development
Authority

35. Iowa Department of
Economic Development

36. North Carolina
Department of
Economic and
Community
Development
Business/Industry
Development Division

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

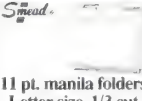
BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Office Supplies/Equipment

America's Lowest Priced Office Supplies Direct to You

WHOLESALE
Company

Letter Size Pads Canary			
Order No: 811CPMCP \$2.99 Dozen	11 pt. manila folders Letter size, 1/3 cut Order No: 153LSMD \$2.99 Box/100	Data cartridge, 60MB, 600' length Order No: DC600ATHM \$18.49 Ea.	9-Pin Dot Matrix Printer Order No: KXP1180POA \$148.99 Ea.

You simply won't find lower prices on brand name office supplies than at Wholesale Supply Company. Over 9,600 different items, same day shipping, and all at prices you have to see to believe. So call now for your free catalog.

1-800-962-9162

Ad Code 0085

Office Supplies/Equipment

DRAWINGS at your FINGERTIPS in SECONDS



KINGFILE
STORES UP TO
1200 DRAWINGS
Attached to suspension strips for single filing
and/or metal hangers for multiple filing
Call today H. SCHREIBER CO. - 717-244-3625

Health/Fitness

Executive BackChair

Engineered for
customized orthopedic
support to prevent and
relieve back pain.

- Forward-tilt
feature
- Adjustable
neck rest
- Built-in
adjustable
lumbar support



As mentioned in
the *Wall Street Journal*
BackSaver™ FREE Color Catalog
1-800-251-2225 or write
53 Jeffrey Ave., Dept. BWE, Holliston, MA 01746

Computers/Office Equipment

CALL OUR "CLUB" OUTLET & SAVE! 1-800-456-9890



\$1438!
PB 386 NB6

**FREE CASE
WITH
PURCHASE**

- * 60MB Hard Drive
(for extra storage)
- * 2MG RAM exp to 10MB
(for extra speed)
- * 1.44 FLOPPY /3.5
- * VGA Backlit 640x480
(incl. no extra charge)
- * 1YR Warranty & Service

**ALSO AVAILABLE
PACKARD BELL 80MB
SCALL**

OTHER CLUB * SPECIALS: *

TOSHIBA T6400 SXC
4MB/120MB HD \$6448

TOSHIBA T3200 SXC
2MB/120MB HD \$5699

EVEREX TEMPO CARRIER
20 MHZ 4MB/80MB HD
\$2688

NEC SL 25C COLOR
2MB/80MB HD \$4998
AST 386/25 MHZ SCALL

**ALSO AVAILABLE:
HEWLETT PACKARD PLAIN
PAPER FAX \$1249.95**

**LAPTOP
WAREHOUSE CLUB**

Ref. res. accepted within 7 days of receipt - only with prior authorization. All returned merchandise must be unused and in original condition. Returns must include all packaging material with blank warranty cards. We reserve the right to limit quantities. Returns are subject to 10% restocking fee. Ship. & Hdg. non-refundable. Not responsible for typographical errors.

Sales Promotions/Premiums

What Makes The Affini-T Shirt™ Different From All Other Shirts?

Personalization.

Our full-color design integrates it all: Corporate logo, event, name of T-shirt wearer — and more! It's one size fits all on 100% cotton. Perfect for events, meetings, trade shows, incentives, awards, and premiums. For pricing call 1 (800) 772-8277; fax: 1 (201) 617-5606.

No two shirts are alike!

The Affini-T Shirt™ One Harmon Plaza
Secaucus, NJ 07094 Attn: Corporate Sales



Sales Promotion/Marketing

Sales Leads & Mailing Lists

- 9 Million U.S. Businesses -
Telephone Verified with Contact Name and Employee Size
- 1.7 Million High Income Americans • 84 Million Consumers/Residents
- 1.2 Million Canadian Businesses • Opportunity Seekers

FREE Catalog - Call (402) 331-7169 or write
American Business Lists
P.O. Box 27347, Dept. 01-062 • Omaha, NE 68127

Newsletters/Periodicals

Stress Management Advisor

- ✓ Reduce workplace stress
- ✓ Decrease costs
- ✓ Manage claims
- ✓ Improve productivity
- ✓ FREE sample

FAX your request to:
619/453-0173
or call: 1-800/788-8959

Security

HELPTAG®
EMERGENCY - PLEASE NOTIFY: AMTSE & VPL PREPARED ADVISORS
11 Betty Alexander Wife 451-
12 Robert Williams Friend 451-
2 John Peterson Doctor 451-
SAY ONE ADVISOR BETTER TO BE AWARE OF YOUR LIFE!
Worn as a bracelet, or a neck chain.
**A LIFESAVER FOR YOU OR
YOUR LOVED ONES...** seniors
children, travelers & active people
The watertight ID capsule with
emergency information - you fill in -
that "speaks" for you when you can't.
Order / Information call: 1-800-HELPTAG
© Information Devices Inc. Dept. 104
P.O. Box 1474 • Pawtucket RI 02862
M/C&Visa • Starting @ \$14.95 (P&H \$ 2.95)

Education/Instruction

COLLEGE DEGREE BACHELORS • MASTERS • DOCTORAL

For Work, Life and Academic
Experience • No Classroom
Attendance Required

Call (800) 423-324
or send detailed resume
for Free Evaluation

Pacific Western University
600 N Sepulveda Blvd., Dept. 170
Los Angeles CA 90049 U.S.A.

Major Scottish University offers International MBA entirely through home study.

No Bachelor's degree required. Origin
founded 1821. 100% student aid available.
Under \$6,000. Ann Edwards, Heriot-Watt
University, (U.S. Agency), 1780 Shattuck
Ave., Berkeley CA 94709, toll-free (800)
MBA-0707 or fax (510) 841-8771.

HAZARDOUS MATERIALS TRAINING

OSHA 1910.120 11e - Waste Site Work
11p - RCRA TSD Workers, or 11q - Emergency
Response Teams ▲ U.S. EPA Approved
Free Information - Call 803/272-3851
Education and Consulting Resources,
938 Oak Ridge Place
Myrtle Beach, SC 29572

Cable TV

FREE CATALOG! 1-800-345-8899 JERROLD HAMLIN OAK ET CABLE TV DESCRAMBLER

• Special Dealer Prices! • Compare Our Low Retail
Prices! • Orders From Stock Shipped Immediately
• Guaranteed Warranties & Prices!
• All Major Credit Cards
PACIFIC CABLE CO., INC.
7325 1/2 Reseda, Dept. 856 Reseda, CA 91368
For catalog, orders & info. 1-800-345-8899

CABLE TV DESCRAMBLER CONVERTERS, ACCESSORIES Name Brands. Lowest Prices. Best Service.

For FREE 16-page color catalog call
CABLE READY (800) 234-1010
COMPANY

FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKETPLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Tobacco Products



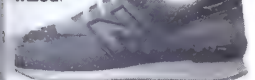
AMERICAN SPIRIT natural tobacco and cigarettes. 100% free of chemical additives. If you have wanted to stop smoking but could not, or if you smoke out of choice rather than habit... Here is an alternative you should at least try. By sending \$2 for samples, I certify that I am of legal age to purchase tobacco products, and you will send me one pack each filter and non-filter cigarettes and one pouch of loose tobacco. POB 1840, Sample Request Department BWK2, Santa Fe, NM 87504. MC/V (800) 332-5595.

SURGEON GENERAL'S WARNING:
Quitting Smoking Now Greatly
Reduces Serious Risks to Your Health

Menswear/Fashion

WIDEST SHOES

EEEEEEEE, SIZES 5-13
ra width for men who need it.
cellent variety, styling and quality.
nd for FREE
TALOG



Widest Selection of the Widest Shoes Anywhere!
ITCHCOCK SHOES, INC
Dept. 55E Hingham, MA 02043

Business Opportunities

PERSONALIZED CHILDREN'S BOOKS

Turn a small investment into that
offtable full or part time business you
have always dreamed about!
excellent home operated business!
sks sell fast in stores! At fairs! Parties!
is! Or mail order... anywhere there are
ple. It's easy to make \$4000 to \$8000
month making and selling our excit-
line of personalized books (for chil-
n & grown-ups). Personalized audio
es and stationery available also
CALL TODAY! (214) 248-9100
D & K ENTERPRISES, INC.
3216 Commander Drive, Suite 101
Dept. 21
Carrollton, Texas 75006

you had acquired territorial
tribution rights in the '80's
or Lotus or WordPerfect-

It would YOU be worth now?

have a similar opportunity in
emerging software category.
00-521-3279 • Norick Software

OUR OWN BUSINESS NO RISK.

Information. Start a profitable
scholarship matching business
out experience or capital.

00-365-8700 ext. 636

Financial Services

BIG-NAME STOCKS TO UNLOAD NOW:

My new Performance
Ratings of all NYSE
stocks show 200 ex-
tremely vulnerable
stocks (rated 8 or 9)
-including some very
famous names -
which I believe could
"take a bath." I'll rush
you the Performance
Ratings (\$45 value) as a bonus with
your subscription to *The Zweig Fore-
cast*. Time is crucial.



MARTIN ZWIG

Three-Month Trial \$55.
One Year \$265. Visa or MC
1-800-535-9649 Ext. 9024.
THE ZWIG FORECAST
P.O. Box 2900, Wantagh, NY 11793-0926

Mastercard/Visa Rates as low as
8.50%, some with no annual fee,
minimum credit requirement,
offered nationally! For current
list of Banks, send \$5 to:

United Association
Dept. B
P.O. Box 425
Jamaica, NY 11413

Computers

NEC MultiSync FG Color Display Solutions



- IBM PC/MS-DOS and Mac compatible
- AccuColor Control System allows you to adjust on-screen colors to meet your individual needs and preferences.
- TWO Year Warranty

MultiSync 3FGx15" \$629
MultiSync 4FG (15" with AccuColor) \$749
MultiSync 5FG (17" with AccuColor) \$1339
MultiSync 6FG (21" with AccuColor) \$2769

PRS Pacific Business Systems
7 Musick
Irvine, CA 92718 (714) 768-8114

Business Software

Are You Starting or Running a Business?

Then you need this Business Software Bundle
Three Quality Software Programs
• Spinnaker PFS Integrated Software
(5 features)
• Spinnaker PFS Desktop Publishing
• Peachtree Accounting Software
PLUS a FREE bonus software gift.
All for only \$269.
Regular retail price-\$416. Available in DOS
or Windows versions. Call or fax for info.
Phone: (800) 257-0073, ext 103
Fax: (301) 459-3776, Dept. 103
ARS Software Corporation
8201 Corporate Drive, Suite 1110
Landover, MD 20785 • (301) 459-3773

Travel

CULTURAL TOURS OF TURKEY

Best of the Greek and Roman
civilizations are in Turkey. We
stress culture and history.

1-800-448-0515

Presentation Equipment

The most advanced pen sized
Laser Pointer
INFINITER™



800-854-6686

\$92
Plus Tax, \$5.00 S&H
ALPEC
55 Oak Court, Danville, CA 94526
Tel: 510 820 1763 Fax: 510 820 8718
MasterCard VISA

Computers

HIGH PERFORMANCE AT BIG SAVINGS!!! Everyday Lowest Prices in the U.S.A. The UNIVERSAL COMPUTER Difference!

386 SX25 \$ 899
386 DX40 \$ 999
486 DX33 \$1399

WE
EXPORT!



- ALL MODELS:
- 14" H/R Monitor
 - 1 MB RAM
 - 42 MB HD
 - 3.5" & 5.25" FDs
 - 101 Enhanced AT KB
 - DOS 5.0
 - Windows w/Mouse
 - One Year Guarantee
 - 45 day Refund Policy
 - Satisfaction Guaranteed
 - Credit Cards:
 - AMEX, VISA, MC



UNIVERSAL COMPUTER

4401 PONCE DE LEON BLVD., CORAL GABLES, FL 33146, U.S.A.
CALL 1 (800) 457-4433 (305) 446-9905 FAX: (305) 446-9928

MUST LIQUIDATE!

14¢ On The Dollar!†

IBM® XT with Monitor

Includes one of America's
most popular and easiest
to use integrated software
packages, already loaded
on the hard drive for you!
Handles database
management, word
processing, reports and
spreadsheets!



IBM COLOR
MONITOR!

10 MB
HARD DRIVE!

Original List if New
\$2895.00

OUT THEY GO!

\$398

Plus \$24 S/H each
Item #C5409-8441

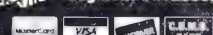
- Genuine IBM Quality!
- IBM Color Monitor included!
- 640K RAM!
- 10MB Hard Drive!
- 360K 5.25" Floppy Drive!
- 8088 / 4.77 MHz Processor!
- Software already loaded on the hard drive for you!
- Standard XT Keyboard!
- Serial Port!
- Parallel Port!
- Color Graphics Adapter!
- 800# for technical assistance!
- Ready to use! Includes everything you need to get started!
- 100% Refurbished by Exsell!
- 90 Day Limited Warranty!

COMB
AUTHORIZED LIQUIDATORS

1-800-522-3035

COMB CORP.
720 Anderson Avenue
St. Cloud, MN 56301

Segment #4128302



FOR AD RATES
AND INFORMATION
PHONE:
(312) 337-3090
OR WRITE:

BUSINESS WEEK MARKET-PLACE

BUSINESS WEEK
MARKET-PLACE
100 EAST OHIO STREET
SUITE 632
CHICAGO, IL 60611
FAX: (312) 337-5633

Corporate Gifts

100% Cotton/Your Logo! — Better Than Lacoste or Ralph Lauren!



Our 100% cotton American Made polo shirts, custom embroidered with your logo are such good quality, we unconditionally guarantee them for an indefinite period of time! Free shipping for international orders. For a price list and catalogue please call

1-800-847-4478

Fax 1-718-782-4614

The Queensboro Shirt Company
Dept BW 26, 119 N 11th St., Greenpoint, NY 11211

Newsletters/Periodicals



PRACTICAL PRESENTATIONS

The How-To Newsletter
For Business Presenters

Call for free sample issue: (619) 934-9692
or write to C&M Communications,
P.O. Box 3235, Mammoth Lakes, CA 93546

Corporate Gifts

"Chicago's Own Gift Shop"
at Here's Chicago!

T-Shirts/Caps/Sweats
Cubs/Bulls/Bears/Sox/Hawks
— Gangster Memorabilia —
Videos — Books

1-800/428-8557

Shipped anywhere in U.S.

Business Services

RESEARCH REPORTS

19,278 academic topics available!
Send \$2.00 for the 272-page catalog
Custom-written reports also available

RESEARCH ASSISTANCE

11322 Idaho Ave., #206BF,
Los Angeles, CA 90025

Toll Free Hotline: 800-351-0222
(California: 310-477-8226)

NEED A NEWSLETTER?

Our one-stop design, printing and
mailing service makes it easy.
Hundreds of satisfied customers nationwide.
Free info/prices: (800) 359-5993

PRINTING • DESIGN • COPY • SHIP • DATA EXPRESS INC.

CORPORATE TIES

(150 pc. minimum)

Gain recognition from
neckties customized with
company logo.

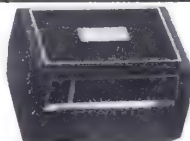
Free literature upon request



BARNARD-MAINE LTD.
33 Mead Ave. • Cos Cob
CT 06807 • U.S.A.

Dept. BW (203) 869 3006

Corporate Gifts



Check*Mate™

The Unique,
Desktop Checkwriter

Give your checks an impressive
professional look!

- Easy to operate
- Clearly prints amount of check in two colors
- Available in decorator colors
- Includes name plate for engraving
- Protects your checks
- Personal or business checks
- Dimensions 6" x 4 1/2" x 2 7/8"
- Ideal gift or premium
- Made in U.S.A.

To order send \$39.95 + \$3.95 S/H Check or Money Order (CA res. add. tax) to:

Effective Products, Int'l.

P.O. Box 6010-777, Sherman Oaks, CA 91413

1-800-786-1597

30 day moneyback guarantee • Mastercard/Visa Accepted
Specify color: Black/Gold, Burgundy/Gold or Black/Silver

IMAGE BUILDERS

PROMOTE YOUR BUSINESS...
EVERYDAY LOW PRICES ON...



IMPRINTED
COFFEE MUGS
AS LOW AS
\$1.29



32 OZ SPORT
BOTTLES AS
LOW AS
\$1.19



EMBROIDERED
CAPS AS
LOW AS
\$4.45

YOUR
LOGO
HERE

CHOOSE FROM
HUNDREDS OF ITEMS.
CALL FOR FREE CATALOG

1-800-792-2277

FAX 1-510-786-1111

THE CORPORATE CHOICE

JAMEE WEST®
LOGO
WATCH

24 HRS.

advertisement

Can you imagine a full color
company logo or any artistic
design on our elegant watch?
Anything is possible! Just
send us your company logo,
artwork or photo and we will
transform it on our exquisite
watch. Deluxe/Standard
watch with precision quartz
movements, leather strap
plus 1 year warranty.

Please send us \$15.95

(Lmt. 2 sample/company)

JAMEE WEST® LOGO WATCH
9816 GARDEN GROVE BLVD.
GARDEN GROVE, CA 92644

FAX 714-534-4673

1-800-635-2633

CUSTOM MADE TIES

MINIMUM 150

SCARVES

MINIMUM 100

BLAZER CRESTS

MINIMUM 12

FOR CORPORATE
CLUB & SCHOOL USE

THE LEAST
EXPENSIVE
INVESTMENT IN
PUBLIC RELATIONS
YOU COULD
EVER MAKE.



alynn
NECKWEAR

108 DOGWOOD CT., STAMFORD, CT 06903

800-252-5966 • 203-322-4142

DELAWARE INCORPORATION
INSTANTLY, \$95. Free Delaware
Incorporation Handbook. Del
ware Business Incorporated
Inc., Box 5722, Dep't. BW
Wilmington, DE 19808. TOL
FREE 1-800-423-2993 or 30
996-5819 or FAX 1-800-42
0423. VISA / MC / AMEX.

INCORPORATE IN JUST 8 MINUTES!

IT'S EASY... Form a corporation
over the phone without a lawyer.

The Company Corporation
1-800-542-2677 ext. A405

IT PAYS TO ADVERTISE IN THE BUSINESS WEEK MARKET-PLACE

The Business Week
Market-Place Section is a
special advertising feature
appearing in the first issue
of each month. The Market
Place provides an ideal
'Showcase' for advertisers
who have products or ser
vices that appeal to Busi
ness Week's more than 6
million responsive readers.

For rates and information
write:

BUSINESS WEEK
MARKET-PLACE
100 East Ohio St., Suite 632
Chicago, IL 60611
or call (312) 337-3090
or FAX (312) 337-5633

THE UAW NEEDS GOOD BODY SHOP

Anged up by Cat and GM, it rattles toward a crucial convention

has been a rough year for United Auto Workers President Owen F. Bieber. First, General Motors Corp. announced its plan to close 21 plants and lose 50,000 UAW jobs, exacerbating the union's already severe membership decline. Then, Caterpillar Inc. threatened permanent replacement workers, sparking a five-month strike in April and leaving the union a humiliating defeat. Those are just two of the crises Bieber and his colleagues have to ponder as they head to San Diego for UAW's triennial national convention in mid-June.

The union has been trying to respond. It has threatened strikes at GM and is planning a slowdown campaign at Caterpillar to pressure management. Officials are also pushing for changes with attempts to diversify into the service and government sectors. But these efforts seem unlikely to solve the union's many problems. Indeed, some experts predict that the UAW could lose more than 20% of its 850,000 members by the year 2000. The union "requires a bold vision a decade ahead," says Shaiken, a labor expert at the University of California, San Diego. "A union that just reacts won't cut it." The friction at GM poses the union's most immediate challenge, Bieber and Stephen P. Yokich, the UAW's chief negotiator at the company, are fumbling the way GM Chair Robert C. Stempel has identified specific plants to close, then pitted them against another to extract favorable changes—a strategy of whipsawing. To reduce Yokich is waging what he calls "guerrilla warfare." He has instructed some locals to build a backlog of formal grievances so he can mount a fight at individual plants, a tactic he used at GM in the

past. "The feeling is, they're going to pay for that [whipsawing]," says Donny G. Douglas, president of Local 594 in Pontiac, Mich.

TRICKY PARTS. The flash point could come at GM's largely inefficient parts plants, which employ 80,000 UAW members. GM still makes 70% of its parts in-house, vs. 50% at Ford Motor Co. and 30% at Chrysler Corp.; they've farmed out much of the work to cheaper non-union suppliers in the U.S. and over-

seas. GM has been following suit in recent years. And in early June, the company stepped up the pace by reopening all of its parts contracts to competitive bids. GM officials said pointedly that they won't favor in-house plants, so the UAW could lose many more jobs. Indeed, GM needs to buy more of its parts from outside to become competitive, argues Sean P. McAlinden, a researcher at the University of Michigan's Office for the Study of Automotive Transportation.

The rising animosity makes it tougher for the union to slow the job losses. Yokich's predecessor, Donald F. Ephlin, had negotiated a process that gave locals a chance to keep jobs by proving that they could produce the parts more efficiently. But GM hasn't cooperated recently. And Yokich's strategy of calling local strikes to protest job losses only seems to make GM more combative.

The union isn't faring well at Caterpillar, either. To counter the company's hard line, UAW staffers have been training some 500 union stewards to do no more than what contract rules require. The goal: to hurt Cat by slowing production. "This is not over with," vows Bieber. For instance, the UAW is trying to enlist other unions, such as European longshoremen who unload Cat shipments, to pressure the company.

The UAW has had little experience with such tactics, however. And it has declined assistance from other unions such as the United Steelworkers of America, which recently won a spectacular victory with this approach at Ravenswood Aluminum Corp. "Their attitude seems to be: 'We're the mighty UAW, we don't need anyone's help,'" says one AFL-CIO official.

The slow response at Cat may already be coming back to haunt UAW leaders. Some 320 striking members of Local 1440 in Columbia City, Ind., said they feared a replay of the Cat situation and returned to their jobs recently when Dana Corp. threatened to move auto-parts production to other plants. About 43 members remain on strike, and the international has moved to take control of the local.

For the long term, the UAW's sliding membership is its biggest concern. The union's ranks have fallen by

THE UAW'S PROBLEMS

BARGAINING CLOUT

In part because the union has organized only 8,000 of the 100,000 auto workers at Japanese transplants, it now represents 68% of the industry's work force, vs. 86% in 1978, so it has less leverage

MEMBERSHIP

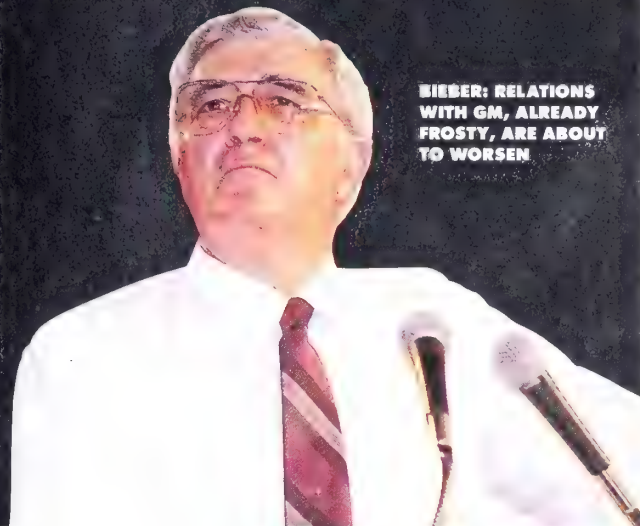
Declines in the defense and auto industries could cut membership by up to 20% in the '90s, from 850,000 today. The UAW has organized 60,000 new service and government workers since 1980, but this won't offset the decline

GENERAL MOTORS

Relations with GM, which employs a third of the UAW's members, are worse than they've been in years as the company moves to close 21 plants and jettison 50,000 union jobs by 1995

LEADERSHIP

Neither President Owen Bieber nor his likely successor, Stephen P. Yokich, seems to have a long-term plan for stemming the union's decline



BIEBER: RELATIONS WITH GM, ALREADY FROSTY, ARE ABOUT TO WORSEN

INTERNATIONAL PERFORMER

100% NO LOAD

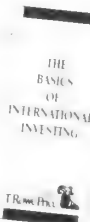
T. Rowe Price International Stock Fund has outperformed the Lipper average for all international funds for the past 1, 5, and 10 years.* It invests in established foreign companies to enhance your return potential and diversify your investments.

Call for a free report. Our report on international investing discusses factors you should consider when investing overseas, including currency fluctuations and other special risks.

\$2,500 minimum. (\$1,000 for IRAs). No sales charges.

T. Rowe Price, 100 E. Pratt St.
Baltimore, MD 21202

Request *The Basics Of International Investing* report and a prospectus with more complete information, including management fees and other charges and expenses. Read the prospectus carefully before you invest or send money.



Call 24 hours for a free report
The Basics Of
International Investing
1-800-541-6428

Invest With Confidence
T. Rowe Price



*Average annual total returns for the 1-, 5-, and 10-year periods ended 3/31/92 are 5.4%, 8.0%, and 18.7% for International Stock Fund, and 1.5%, 5.3%, and 15.6% for all international funds, according to Lipper Analytical Services, Inc. Figures include changes in principal value, reinvested dividends, and capital gain distributions. Investment return and principal value will vary, and shares may be worth more or less at redemption than at original purchase. Total return represents past performance and cannot guarantee future results. T. Rowe Price Investment Services, Inc., Distributor

Sometimes, love is deaf-blind



Whatever the visual and hearing impairment, we help people like Linda Carter, and their families, make the transition from school or institution to real life in the real world. Can we help someone you love? Call 516-944-8900 (TTY/Voice).

Share Helen Keller's vision.

Helen Keller National Center

For Deaf-Blind Youth and Adults
111 Middle Neck Road, Sands Point, NY 11050

The Workplace

550,000 since 1979. Outsiders such as McAlinden think the union could lose 200,000 more members this decade. A chunk could come at GM if it sheds 15 of parts jobs. The proposed free-trade agreement with Mexico plus an industry-wide drive toward efficiency may eliminate many of the 150,000 jobs the UAW has at independent parts suppliers. Already, Big Three auto makers are pressuring suppliers to shift operations to Mexico. And defense cuts will end another 80,000 more UAW jobs.

NUMBERS GAME. The union has been diversifying to offset such losses. It added 60,000 service industry and government workers to its rolls since 1981 and now represents everyone from graduate teaching assistants at the University of California to writers at New York's *The Village Voice*. UAW organizers say they can top this record in the 1990s. But doing so won't keep membership at today's levels.

The UAW could pay a heavy price if it can't do better. Unless it raises dues, it's tough to do with service workers, who usually earn less than auto workers—finances could suffer. This would damage the UAW's bargaining strength, making it hard to maintain its \$800-million strike fund. And lower membership could weaken the union's political clout both locally and in Washington.

Even if new members can be found, the union's negotiating power may decline. It has largely failed to organize Japanese transplants such as Honda Motor Co. Nor has it been able to sign workers at the parts companies to which the Big Three sent work in the 1980s. As a result, the union represents less than 68% of U.S. auto workers today, vs. 78% in 1978, according to Stephen A. Herzig, a labor expert at Congress' Office of Technology Assessment.

All these problems heap pressure on Robert J. Bieber. Increasing numbers of UAW members say they want him to step aside before his scheduled retirement in 1993. But there's no organized effort to force him out. The UAW leader defends himself by saying: "We have done better than many other [unions] have." And with a majority of delegate votes in his favor, Bieber is a shoo-in to win in San Diego against a dissident, former regional director Jerry Tucker.

One of Bieber's priorities in San Diego will be to whip up support for Arkansas Governor Bill Clinton. Like many leaders, he figures that Clinton will be the most sympathetic of the Presidential candidates to labor's woes. But the year this has been going, it will take a lot more than a Clinton victory to turn Bieber's union around.

By David Woodruff in Detroit

Buying Tomorrow's OFFICE EQUIPMENT Today



**In cooperation
with NOMDA,
The National
Office Machine
Dealers
Association**

The modern office is a fascinating combination of automation and imagination. Yesterday's metal meets tomorrow's microchips to improve productivity everywhere from the boardroom to the mailroom. There's only one flaw in this seamless integration of man and office machine: machines, unlike man, aren't perfect.



Now, aren't you glad you bought your office equipment at the local warehouse club, that covered football field where service means a surly teenager at the checkout stand and we buy fax machines like we were purchasing milk at the supermarket, right down to the shopping cart and the bar code reader?

To quote the vernacular, not.



The NOMDA Difference

Entrusting the long-term health of your office equipment to an establishment that specializes in gross lots of mixed nuts and disposable diapers is a very bad idea, unless of course you're intimately familiar with rewiring motherboards.

"Service" can mean many things: a friendly face offering you a smile and a shopping cart; speedy delivery of purchased goods such as hamburgers or a lube job; or actually fixing a product when it breaks.

While the first two definitions are nice, service with a capital S for screwdriver is essential for your office's essential machines, including the copier, the fax machine, the printer and the local area network that connects everyone's computers so we can communicate with other departments and company divisions via electronic mail.

If your company is large enough, the people who built the equipment will fix it when it breaks. Otherwise, you may wind up buying service from a specialist who defines loyalty as charging you "only" \$100 to wave his eyes over your copier, then add toner.

The best solution is to buy office equipment from an authorized dealer who services what he sells. And chances are he's a member of the National Office Machine Dealers Association (NOMDA).

NOMDA dealers provide their customers with one thing: value. Value is very different from cost. The cost of a piece of equipment is

extremely irrelevant when it's broken. Its value is zero when it doesn't do what it's supposed to do. NOMDA dealers come to your office and restore the value of the equipment by making it work again. Very simple, right? Then why are you shopping for a fax machine at the same place you buy janitorial supplies?

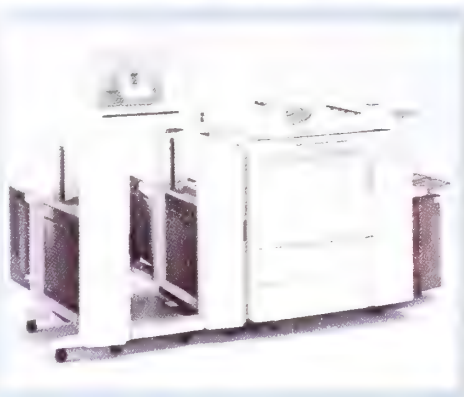


Copiers: fast, faster, fastest

NOMDA dealers are at their best when it comes to the office copier, that amazing combination of electricity, photography, chemistry, rubber, metal, plastic and a few microchips to create the cute little serviceman icon on the control panel.

Breakdowns are inevitable; think of a copier as an automobile with paper trays instead of tires and a numeric keypad for a transmission.

TOP RIGHT: Ricoh fax 22.
LEFT: Canon NP6060. RIGHT: Minolta EP 8602.



A copier needs regular tuneups, or (jargon alert) preventative maintenance, to ensure consistent operation

despite never-ending torture from users. In fact, most businesses abuse their copiers terribly by running off more copies than the machine is designed to handle, an effect not unlike driving a compact car at 100 miles-per-hour as often as possible.

Your NOMDA dealer can recommend the best copier for your specific needs, whether it's one copy of dozens of documents, or dozens of copies of one document. Some models to consider include:

The SD-2075 from Sharp Electronics Corporation, Mahwah, N.J., is a 5 copies-per-minute (cpm) copier with a recommended monthly volume of

to 150,000 copies. The recirculating document handler (RDH) automatically feeds originals and returns them

Canon introduces the CJ10 color copier, printer, scanner.



Now the power of color is yours.

With the CJ10 on your desk top, you can make remarkably high-quality full-color copies and overhead transparencies.

In fact, CJ10 copies have virtually the same picture-like clarity and crisp, black text as copies made by Canon's renowned Color Laser Copiers. And, with a simple option, the CJ10 connects to your computer so you can scan and print in high-quality color too.

The complete CJ10 desktop full-color system lets you create such effective color documents that it could be the most powerful business tool ever put on a desk top.

It's easy to use, easy to maintain, and priced so that it's easy to afford. With a CJ10, the power to improve your image is finally within your reach.

For more information, simply call 1-800-OK-CANON.

CJ10
COLOR BUBBLE-JET COPIER

Canon

the original stack for repeat copying, resulting in collated copy sets. You can even replace paper and toner without interrupting a copy job.

Standard Duplicating Machines Corporation, Andover, Mass., specializes in high-speed digital duplicators that marry traditional printing techniques with the latest 400x400 dots-per-inch (dpi) resolution to create hundreds of copies of a single original for pennies a page. New models include the SP-9150 with digital editing to remove

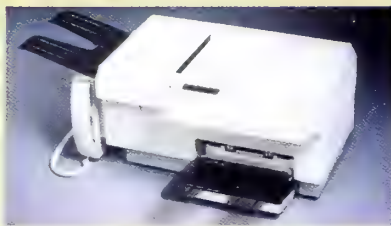
supply, and one-percent zoom increments from 50 to 200 percent. It can even copy up to 300 pages of pin-fed computer paper at a time without the need to separate them... the perfect gift for your accounting department.



unwanted portions of a document electronically as well as a massive 1,000-sheet paper tray, and the economic SP-9110 with multiple reduction and enlargement modes.

The FT5590 from Ricoh Corporation, West Caldwell, N.J., operates at 50 cpm while offering many convenience features and maximum on-line paper capacity. To handle long copy runs, the FT5590 can use up to four paper sources for a total capacity of 4,000 sheets. Other features include automatic duplexing, a multi-sheet bypass feed table, and manual and automatic image density controls to ensure high-quality copies.

For maximum speed at a minimum price, the DC-8585 from Mita Copystar America, Hasbrouck Heights, N.J., makes 85 copies-per-minute...almost 1.5 copies-per-second. Holding up to 1,850 sheets, the DC-8585 offers automatic duplexing to print on both sides of the copy to save time, paper and filing space, an extra large toner



TOP: Sharp FO-9000. MIDDLE: Mita LDC 550. BOTTOM: Smith Corona PC 100

All that speed requires a paper supply that holds enough bond to repro-

duce *War And Peace*. Many manufacturers now build paper drawers into copier cabinet to hold thousands of sheets and keep the machine humming for hours without refills. NOMDA dealers representing Ricoh, Panasonic, Sharp and Mita, among others, will be happy to show you the latest in digital yourself printing plants.

The 2028 from Konica Business Machines U.S.A., Windsor, Conn., features five optional paper sources for a total supply capacity of 2,050 sheets. It produces 28 copies-per-minute even when using the optional reversing automatic document feeder that feeds up to 50 8-1/2" x 11" originals, and an optional duplexing unit can make two-sided copies from one- or two-sided originals without operator involvement.

Another factor to consider when copying long runs is toner supply, especially when copy quality is paramount. The EP 8602 from Minolta Corporation, Ramsey, N.J., has a large-capacity toner reservoir that lets users make up to 50,000 copies without a refill. Better yet, users can add toner while the copier is running at a brisk 60-copies-per-minute clip.



Remote Diagnostics: The Final Frontier

Everyone is familiar with the "copier guy," the toner-encrusted serviceman with black fingernails and an alarmingly bad disposition, especially when he finds paper clips in the document feeder.

Here's the drill: the copier stops working; someone calls; you wait; the copier guy arrives; disassembles the machine; pronounces it dead; leaves; you wait some more; he returns half an hour later with the correct part; fixes the machine.

It's not the serviceman's fault. He doesn't carry every conceivable part with him (imagine if a car mechanic came to fix your brakes in your garage instead of his). And it's not like the copier guy can tell him what's wrong, right?

Guess again.

The Remote Communications System from Canon U.S.A., Lake Success, N.Y., allows a copier to communicate with a host computer located at an authorized service facility. The system enables a computer



THERE ARE TIMES WHEN FASTER IS DECIDEDLY BETTER.

Which is precisely why our new EP 9720 Pro Series copier was created. It makes quick work of even the most monstrous copying jobs. First off, it turns out a rapid 71 copies per minute, even with legal-size documents. Plus it's as efficient as it is fast. With standard features like a 20-bin stapler/sorter that produces finished sets in a flash.

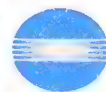
And a unique feeder design that lets you copy continuous computer forms without separating them. Not to mention Minolta's remarkable S.M.A.R.T. system, which automatically reports copy counts and schedules pre-

ventive maintenance via a direct link to your dealer's service department. Sure, there are other ways to make copies. But if speed is important, we suggest you call 1-800-9-MINOLTA.

Pronto.



PRO SERIES COPIERS
ONLY FROM THE MIND OF MINOLTA



MINOLTA

track and diagnose copier performance, and recommend appropriate service action. Using standard telephone lines for two-way communications, a copier initiates a call to the computer, and the computer responds back to the copier, allowing the service facility access to information that a technician would use to analyze machine performance.

The Panasonic Remote Operating System (PROS) from Panasonic Communications & Systems Company's Office Automation Group, Secaucus, N.J., goes one step further and permits minor repairs like image registration and toner density to be adjusted via two-way phone lines instead of an on-site service call. A Panasonic copier equipped with PROS can tell a NOMDA dealer what's wrong, so when the service rep comes to your office, he already has the parts he needs to return the copier to peak performance levels.

Other copier manufacturers like Mita and Minolta offer diagnostic systems that let dealers keep track of the number of copies your office makes via phone lines, so they know when your machine needs a tune-up before you start noticing those black streaks on the copies of the presentation you have to give tomorrow morning.

Color Copiers: Reams Of Rainbows

Color copiers have been available for decades, but the expense was enough to make even the Wizard of Oz blanch. Today, several models that produce vibrant copies of color originals are available for well under \$20,000, and some sell for the cost of a comparable black-and-white machine five short years ago.

The Prism Isp from Savin Corporation, Stamford, Conn., has a straight paper path, which means it makes color copies on heavy card stock as well as regular bond paper and transparencies. It makes 7.5 full-color copies per minute, and features an optional 35mm adaptor to make color copies from

Minolta has made a colorful splash with



its NC100 full-color copier that also provides full-featured black and white capabilities, making it ideal for general office applications in a variety of businesses with the need for color copying of presentation graphics and desktop publishing originals.

Like its high-end brethren, Panasonic's FP-C1 digital copier that can manipulate original images with a wide variety of editing features, including



TOP: Mita DC8585. BELOW: Ricoh FAX 105.
RIGHT: Canon AP 780.

reversing, masking, compressing, expanding and adding color to black and white copies. The FP-C1 XE also makes digital black and white copies at a rapid 30-cpm clip, and can even create posters using segment zoom, which enlarges segments of an original to be pasted onto a board.

Canon has long been the leader in color copying. To expand the color market, it recently introduced the CJ10 Desktop Color Bubble-Jet Copier that both creates and reproduces high-quality

color documents from original color art, a computer or even a VCR. The CJ10 retails for less than \$10,000 despite offering 256 gradations of color and 400x400 dots-per-inch resolution. It's the ideal solution for an office that sees the world in color, and wants to share its vision without breaking the bank.

Fact's about fax

Chances are your business relies on a facsimile machine purchased back in the Dark Ages (i.e., 1987). It spits out curly thermal messages that seem to

fade in direct proportion with the information's importance. Its idea of memory is 10 quick-copy buttons that no one ever bothered to program. Also, sending a document that features even a smidgen of solid black (like your company logo) seems to take longer than the time between new Bruce



Springsteen albums.

The answer is plain. Paper, that is. Our amazement over fax technology has been replaced by the same how-did-we-survive-without-it attitude we usually reserve for overnight mail or laser printers. In fact, the laser printer is an important component of most plain paper fax machines, which add a scanner to input documents and some communications chips (i.e., the telephone) to make faxing a pleasure instead of a problem.

Most NOMDA dealers have resigned thermal fax to the individual

#

Canon's Position On Plain Paper Fax.

For three years running, one company has sold more plain paper faxes than any other. That company is Canon, the undisputed leader in plain paper facsimile.

Canon has a complete line of advanced facsimiles to choose from. Our FAX-L3300 is a super-fast desktop digital fax that can transmit a page in only three seconds. Our full-featured Laser Class™ 700 Series features our exclusive UHQ™ and Hyper-Smoothing technologies which allow you to send and receive better looking faxes than ever before! And our economical FAX-A501 makes the advantages of plain paper more affordable for everyone.

We also make choosing a plain paper fax easy. If you call 1-800-OK-CANON, we'll mail you a Decision Maker's Kit designed to help you find the perfect Canon fax for your needs.



Or, if you want product information faster, we'll fax it to you.

We will also direct you to your nearest Canon dealer, who is uniquely qualified to help you during their special promotion.

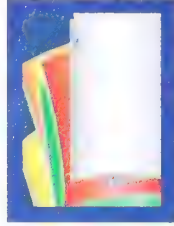
When you're dealing with #1, the decision is always easy. And in plain paper fax, it's Canon.

Canon

Enjoy easy extended payments with the Canon Credit Card. Ask for details at participating Canon dealers and retailers. Available only in U.S.

users who see fax as an extension of the telephone answering machine. If your fax machine is an important part of your business (i.e., your customers fax purchase orders) or you save fax documents (like those purchase orders), you're pouring money down the drain using a thermal fax.

Try this experiment: count how many times you make a copy of a fax message. Isn't it fun feeding those curly documents into the copier? Multiply that by the cost per copy of your copier (ask your NOMDA dealer). Add the cost of the thermal paper. Advanced students can factor in the time it takes to make that copy in man hours.



ness Machines U.S.A., Sharp's F0-1600, Panafax's UF-766 and many other high-end models.

You can also find 400x400 dots-per-inch (dpi) resolution on most top-rated machines (most laser printers are 300x300 dpi), which makes faxing graphic images and photographs less of an exercise in art interpretation ("is that supposed to be the XYZ trans-

dorf office is finished tying up the machine for half an hour. Documents can be scanned into memory in as little as 1.5 seconds-per-page, so you don't have to stand around and wait. The fax machine takes its own sweet time running each page through the scanner.

Brother International, Somerset, N.J., has introduced some new twists to the fax sweepstakes. A new Auto Curl System on the InstaFAX 1200 automatically flattens the thermal paper output so incoming documents receive more easily stacked and filed, while the InstaFAX 2200M can be hooked up to a laser printer to make plain paper



**LEFT: NEC
Nefax 430.**

**ABOVE:
VeloBind 750.**

**BELOW:
Konica 865L.**

We are talking real money over the course of a year, more than enough to justify the added expense of a plain paper fax machine.

And you'll be surprised when you ask your NOMDA dealer how much a plain paper machine costs today. For example, the Panafax UF-311 uses the same imaging technology found in Hewlett-Packard's ink jet printers and sells for less than \$2,000...about the same amount you paid for your last thermal machine.

But plain paper output isn't the only benefit of upgrading your fax machine. The newest standard in fax transmission speed is six seconds-per-page using a high-speed 14.4K modem, as found on the 860L from Konica Busi-



former widget, or is it a picture from the company picnic?").

Another way to dramatically increase fax efficiency is to ask your NOMDA dealer for a machine with "dual access." This means you can scan your fax document into memory and program the machine to send it at a more convenient time...like when the 50-page monthly report from the Dussel-

copies when necessary. Both machines also feature Brother's "Smoothing" Enhanced Image Resolution to remove the rough, jagged edges from text and graphics on incoming documents.

But if you're fed up with exceptionally decadent, you may not opt for a full-color machine that makes better copies than most six-color printing presses and send them across the ocean across town using ordinary phone lines? The Sharp G9000 does just that, although you'll need two machines (one to send, one to receive) and a very heavy wallet (approximately \$30,000+ per unit).

Regardless of the model you select, your NOMDA dealer can show you how to dramatically increase the efficiency of your similar communications with static-the-art plain paper products that mean the difference between efficient and exasperating.

After making over a million copies,
Buyers Lab has recommended every
single Mita copier they've ever tested.
(That's a record no other major brand
of copier can duplicate.)

[call 1-800-abc-mita the image specialist]™



EDITED BY AMY DUNKIN

Politics

SIGNING ON FOR CAMPAIGN '92

Riot, taxes, pollution, crime, homelessness—enough! Enough, that is, to have half the nation shouting that familiar line: “I’m mad as hell, and I’m not going to take it anymore.” But some executives know problems aren’t solved by merely voicing anger. They realize, too, that they can do more than simply contribute to a campaign fund or vote for a particular candidate. Instead, they’re volunteering their workaday skills to bring about political change.

Like Ross Perot, to cite the best-known example, some men and women opt to run for office themselves. Others serve as unpaid advisers to elected officials who want to improve their communities. And others lend their talents to help a new candidate unseat a do-nothing incumbent. “Many businesspeople who are concerned citizens think the best contributions they can make are financial,” says Joe Head, a former builder who won a San Jose (Calif.) city council seat in 1988. “Often, their knowledge is of greater value.”

Barbara Johnson agrees. A town councilwoman in North Hempstead, N. Y., she says so many local government issues involve business that any official needs input from experts. Take the increasingly important matters of workers’ compensation and health care for public employees. Johnson admits that her career experience as a labor lawyer, along with her MBA, still leave her hard-pressed to stay abreast of new insurance plans. “So, I depend on a friend in the business to fill me in on them regularly,” she says.

SOLID PLANS. Volunteers who have fresh ideas and the organizational skills to carry them out have helped make San Jose a better place, adds Councilman Head. He cites the efforts of John Redding, a marketing manager for General Electric’s nuclear-energy projects. After Redding conjectured that an area near his home could be developed into a small park for joggers and cyclists, he talked with landscapers about a plan and costs. Then, presentations to the council and two state assemblymen eventually won a



grant of state funds to make the park a reality. “When I first approached the legislators with the idea, I thought they’d tell me to get lost,” says Redding. “But I learned that politicians will back your plan if it’s solid. They know when things work out, they look good, too.”

Typically, elected officials hear complaints rather than

ideas and follow-through programs. Gary Lawson, an environmental chemist at Eastman Chemical in Kingsport, Tenn., learned that lesson while devoting some 20 hours a week to civic matters when he was elected mayor of neighboring Mt. Carmel (pop. 7,000). He won the unpaid position after realizing that as

HOW TO COME TO THE AID OF YOUR PARTY

Want to speak your mind on the country’s problems to a major political figure in private? Try volunteering as one of 40 chauffeurs needed for VIP delegates to the July 13-16 Democratic Convention in New York.

With only weeks to go,

Marilyn Shaw, the staffer responsible for lining up 6,000 volunteer workers, said her toughest challenge was to find drivers who want to battle Manhattan traffic in new sedans leased from GM. You can enlist by calling her at 212 290-2015.

WELCOME WAGON. If you can’t drive—or don’t care to—there are other jobs you can do:

- Help stuff 20,000 party invitations into envelopes.
- Become one of the 300 greeters in red, white, and blue sashes who will meet

the delegates at the area’s airports and guide them to taxis or chartered buses.

- Welcome visitors and dispense information from a re-

**Don’t sign up if
you hope to be in
the glare of the
TV lights**

- ception desk in a hotel lobby.
- Contact other volunteers by phone to make sure they show up for their shifts.

In Houston, where the Republicans will meet Aug. 1-20, Shaw’s counterpart is Caroline Pierce. She also needs some 6,000 volunteers but says she’s already off to a good start: “Many of the people who assisted at the economic summit here two years ago want to help it again.” Her number is 713 650-4678.

Don’t sign up, though, if you hope to rub shoulders with the politicians in the glare of TV lights. Volunteers are admitted to the convention floor.



and the business knowhow follow through on ideas would get a sewer system and other facilities for developing community. These days, even on a local level, a newcomer who runs an office can find broadcast print advertising expensive. The longer the roster of volunteers willing to work for the more you can cut. And before you can get an office, you'll almost certainly have to do some volunteering of your own to learn how the system works. When you offer to help, you can ask for more than hand out flyers or phone strangers and help a candidate.

VICE FOLK. There's always a need for someone with financial knowledge, says Roy Goodman, a New York State legislator for the past 22 years. A candidate making a bid for office needs a volunteer treasurer or a finance committee to track contributions and expenditures and handle the filing of tax filings. A for-

mer investment banker with a Harvard MBA, Goodman says he entered politics as volunteer treasurer for John Lindsay's campaign to become New York City mayor in 1965.

Anyone who knows computers and programming is also in demand. "We need dozens just to work out schedules" for thousands of volunteers at the Republican convention in Houston, says Caroline Pierce, coordinator for the August event (box). With your home computer, you can be similarly useful on a local level: Arsen Muger, a staff business-control specialist at IBM in San Jose, used his PC to organize Head's campaign volunteers. "And I printed 500 copies of a support letter and personally delivered it to homes in my area," he says. His reward? "A good feeling when the votes came in."

Most communities need volunteers for committees in charge of such things as recreation or planning. "Serving on the planning commission is

the most beneficial way to learn how a city works," says Lawson. After a stint on his town's, he asked friends to back his mayoral bid with ideas and follow-through rather than cash. That solved his tax-filing concerns. In response, some wrote letters of

WHERE TO CALL TO OFFER HELP

BUSH/QUAYLE '92

Washington 202 336-7141

CLINTON FOR PRESIDENT

Little Rock 501 372-1992

PEOPLE FOR PEROT

Dallas 214 960-9100

support that ran in the local press. Others painted signs for their lawns or windows, and one placed an ad in the newspaper at her own expense to woo voters.

In contrast, Councilwoman Johnson thought she could start at the top in her first try for office. With \$40,000 in con-

tributions from friends and a bit more than that in family money, she ran against an incumbent state senator in 1988. Defeated, she realized she needed a different approach. She volunteered to work on the campaign of the city council supervisor. His election made her "part of the inner circle." Then, well-grounded in local issues, she ran for a council seat.

QUICK ACTION. "This time, I asked friends in the business community to help me focus on strategies," she says. A municipal-bond specialist advised on the relationship between taxation and bonds to finance community projects. Friends in the media helped write position papers. At Kiwanis meetings, Johnson queried fellow members about their concerns. One was the high cost of government, so the newly elected council promptly cut members' salary by 25% and gave up cars bought at public expense.

As mayor of Mt. Carmel, Lawson used his business-management skills to attack the town's needs in first-things-first fashion. His familiarity with dense regulatory language helped obtain a \$4.5 million federal grant for sewers. And he worked out a deal in which Tennessee pays to have the town's otherwise idle road crews and equipment maintain a stretch of state highway that runs through town.

Think your ideas and ability can help solve problems in your city, state, or the country? Contact the office of an elected official or political party. "It's as easy as picking up the phone," says Senator Goodman. GE's Redding sees a double reward in working on a particular project: "You get satisfaction when you see results and build leadership qualities that are useful in your career." Now working with several volunteer groups pressing for the San Francisco Giants to relocate to San Jose, he adds: "You come up with an idea, develop a plan, and then sell it—the same kind of challenges you face at work."

Don Dunn

Gadgets

LET THOSE CREATIVE JUICERS FLOW

Maybe one sleepless night you turned on the TV and were enthralled by a 30-minute infomercial for an electric juice extractor. Or perhaps a trendy friend of yours served you a glass of fresh orange-celery juice, and... surprise, you actually liked it. Now, you want a juicer of your own. Should you order the one you saw on TV? Or should you visit the local gizmomart, where you might find a dozen machines, some with familiar brand names? Do you go for the \$60 model or the big, clunky one for \$300?

If you plan to use your juicer every day, it may be worth investing in one of the more expensive models. They have stronger motors and are made of more durable materials,

such as metal or thick plastic. Juice-man II (\$300), sold on TV, and the Champion Juicer (\$270), a juice-bar mainstay, eject the pulp from the machine, allowing for continuous juicing.

Less expensive units, such as the Hamilton Beach 395W (\$60), are sufficient as long as you plan on whipping up only an occasional mixture of strawberry and pineapple juice, say, for small brunches, or if you'll be making one glass of juice at a time. The problem with cheaper machines is that the pulp collects inside. So after every glass or two, you have to stop the juicer and clean it out.

CROWDED COUNTERS. Many leading appliance makers offer decent, reasonably priced models. Among those widely available, often at a discount, are the Cuisinart Juice Ex-



TV STAR: JUICEMAN II CAN PRODUCE LARGE BATCHES

tractor/Juicer (\$100), Krups VitaMini (\$75), and Welbilt JE200 (\$70).

When shopping around, take apart and reassemble different models in the store. That will help you determine how easy each will be to use and how many parts you'll have to wash. Find out if the

juicer you like can handle citrus fruit. Some machines need a separate attachment at an additional cost of around \$35.

Even with the most powerful extractors, it takes two large apples to make about six ounces of juice. Softer fruits such as kiwis, have a lower yield. And juicing can be time-consuming. Fruits and vegetables must be washed before juicing and sometimes peeled or cored. All large pieces have to be cut to fit the feeder. So add peeling knives, and cutting boards to the sink

of parts to be washed.

Why bother? Fresh juices provide high concentrations of essential vitamins and minerals. And you may find yourself drinking nutritious fruits and vegetables you normally wouldn't eat. Care for a tasty carrot-kale cocktail before dinner?

Larry De

Smart Money

IN HOMES WE TRUST: HOW TO SLASH ESTATE TAXES

when they're most advantageous. Once you establish it, the rate is locked in for the trust's term—usually 10 to 20 years.

For example, say you put your house, now worth

Put your house in trust to the kids—and keep living in it

\$350,000, in a 10-year trust for your children. According to the IRS tables, if you're 50 years old, the house's value will be \$142,920 when it passes to them. Even if it appreciates in value during

those 10 years, you have frozen its taxable value.

There are pitfalls in the technique. For one thing, if you die during the trust term, your house reverts to your estate and is taxable at its market value. For another, while you can write the trust agreement to let you sell the house and claim the proceeds if necessary, you'll pay capital-gains taxes—and waste the estate-tax credit that was your original goal.

Your kids can't sell the house out from under you. But if you decide you want to stay put when the trust expires, you must pay your children rent. That's why Ross Nager, director of Arthur Andersen's Family

Wealth Planning Practice in Houston, recommends the device for second homes rather than primary residences. Rick Taylor, a senior manager at KPMG Peat Marwick in Washington, agrees: "Parents tend to feel lea-

HOLD THE ART. Another option is to buy your house back from the trust, at full market value, before the trust term is over. The kids get the cash when the trust expires with no transfer tax you stay in the house rent-free, and when it passes to your heirs after you die, has an increased cost basis so your kids won't take a big capital gain if they sell.

Art and furniture in your home can't be included in the trust. So if you have a mansion full of valuable antiques, you'll have to find another way to bequeath them tax-free—like donating them to a museum. Joan Ward

There's something sacred about a home, even to the Internal Revenue Service. When the government tightened the rules on grant- or retained interest trusts (GRITs) in 1990, it spared the type that shields a residence. So, just as mortgage interest remains one of the few legitimate income tax deductions, putting your home in trust can cut your estate taxes.

Individuals can bequeath up to \$600,000 worth of assets tax-free, but anything more is subject to federal estate taxes that can reach 60%. With a personal-residence trust, you give your house to your kids but lower its value by living in it until the trust expires.

GOOD TIMING. The IRS computes the reduction according to tables that factor in your age, the length of the trust term, and prevailing interest rates. The rates change monthly, so you'll want to time the trust to

In 100 countries, business turns to Unisys to help the wheels of business turn.

Some people believe business makes the world go round. But who helps business go round? For thousands of companies and governments around the world, the answer is Unisys.

One hundred forty airlines rely on Unisys information systems for bookings, departure control, and flight operations.

Over 80% of the world's largest banks, including nine of America's top ten and every one of Japan's top ten, count on our systems for branch automation, check processing, funds transfer, and more.

Telecommunications companies across the globe turn to us for revenue-generating enhanced services.

And in the business of government, over 1,600 government agencies worldwide depend on Unisys computers.

There is a term for all this: *mission critical*. Solutions without which a business cannot do business. Sixty thousand customers in 100 countries recognize Unisys as a leader at delivering mission-critical solutions. And as a pioneer at delivering them on open information networks.

Our customers choose us not only



for the strength of our technology, but also for our ability to apply it through a careful understanding of their industries. And whatever their industries,

they know us for the depth of our commitment to providing the services behind the systems.

Now it's your turn. Call us at 1-800-448-1424, ext. 180. Ask how the advanced solutions and dedicated people of Unisys can help your business shift into a higher gear.

UNISYS
We make it happen.



*Friendly
formality
Cliveden Meals
are cooked made
with a mix of such
English delicacies
as fish and shellfish
and lamb*

Travel

A STAY IN THE SPLENDOR THAT WAS ENGLAND

I confess: I am a sucker for *Upstairs Downstairs*, for E. M. Forster novels, for anything that conjures up Edwardian England—an era of luxury and gracious living completely alien to Americans (and to most of the English, as well). But those days live on at Cliveden, a stately home in Berkshire that's now operated as a hotel. At this country resort, 25 miles due west of London, travelers can see the bed Sir Winston Churchill slept in—and they can sleep in it, too.

The spell begins as you motor through the wrought-iron gates and up the long gravel drive to the Italianate palazzo looming before you. The assembled staff hurries out to greet you and grab your luggage. Cliveden has 31 guest rooms, each decorated differently, but all with fireplaces, canopied beds, pillowy couches, and deep marble bathtubs. No need to unpack: The valet or maid does that, whisking away for ironing anything that shows even the slightest wrinkle.

That sort of exquisite efficiency—anticipating whims

you didn't even know you had—gives you the feeling that you're not in a hotel but at home. Other guests aren't much in evidence, either, thanks to all the space: nooks, crannies, and myriad sitting rooms. "Even when we're



full, people ask: 'Is anybody else here?'" says manager John Hanna.

You do mingle with fellow guests at mealtime, however. While some people moan at the thought of English cooking, Cliveden's chefs could

make you a fan of steak-and-kidney pie or trifle, which share menu space with Continental specialties. A traditional English breakfast of kippers and kidneys in one of the two dining rooms, whose full-length windows overlook the grounds, is a perfect way to start the day.

Although there's plenty of charming country to explore nearby, most guests prefer to stay on the grounds. Cliveden has the usual sports: golf, tennis, and riding amid the gentle hills. One special summertime treat is boating on the Thames in a restored wooden launch, docking for a picnic of Scotch salmon, smoked quail, and strawberries. Then, there's rambling around the 376-acre estate, dotted with statues, gazebos, and fountains. Cliveden boasts a variety of gardens: the formal French parterre; the tiny, wild rose garden; and the long garden, with its fantastic topiary.

STEAMY PAST. And there's the house itself. Originally constructed in 1666, it was rebuilt twice in the 19th century as it passed through a succession of owners, both peers and commoners. In 1893, William Waldorf Astor bought the property. The Astors entertained a variety of public figures—from Churchill to Shaw to Chaplin—and Cliveden became known as a social

and political center. In the 1930s, Nancy Astor's "Cliveden set" was known for pacifist—some say pro-Nazi—sentiments. And in the early 1960s, call girl Christa Keeler met former Minister of Defense John Profumo there—sparking an affair that brought down the Conservative government. Guests can still swim in the pool where Profumo first saw Keeler voriting naked.

That sort of thing frowned upon at Cliveden today, where an atmosphere of friendly formality prevails. But plenty of bodily pampering goes on at the two-year-old spa, which offers massages and beauty treatments for \$45 to \$80.

A Cliveden stay is precious in every sense of the word. The rooms range in price from \$350 to \$820 a night. That includes sports facilities, but all meals except Continental breakfast are à la carte. (Call 011-44-628-668561 from the U.S. for reservation.) Still, as you sweep down the carved-oak staircase, stroll the stone terrace, or curl up in the paneled library, it's hard not to feel it all belongs to you. Some folks even go downright territorial. Since Cliveden is owned by The National Trust, the grounds are open to the public. But in the morning, a guest mutters, "Who invited these people onto my land?" *Troy St.*

Worth Noting

■ **CLASS CASH.** Scholar Aid (800-925-4723) provides students with about 100 sources of awards and scholarships to help pay for college and vocational training. The service costs \$69.95. If you don't have at least \$100 worth of assistance, Scholar Aid sends you a \$100 savings bond.

■ **TRAVEL LIGHT.** *The Insider's Guide to Air Courier* (Inwood Publishing) lists courier companies that offer discounted fares worldwide for those willing to give up their checked-luggage spots. Call 800-356-9315.

Introducing Photography Without All The Negatives.



New FotoMan™ – the portable, affordable camera for your computer.

No more wasting time and money having film developed! Pocket-sized FotoMan shoots up to 32 pictures in a session, and digitizes them in 256 shades of gray. With a built-in recharge-

able battery, automatic flash and outdoor filter, you can take shots anywhere – one button operation and infinite field of focus make it easy! Pop the pictures into your PC via the serial port (you don't need a digitizing board), and use Windows®-compatible FotoTouch™ software to crop backgrounds, change sizes, adjust contrast – even create special effects. All for just \$799. For the whole picture call: 1 800 231 7717





How we look to our members.

Today, in a world grown less forgiving and more competitive, a lot of businesses seem to be groping for silver bullets. Secrets to success.

So here they are.

Give really good service. And put your money in a safe place.

At least, that's what works for us.

So when our members think of Blue Cross of California, they have a

vision of a person at the other end of the phone who is very well trained, responsive, and competent.

Someone to call when they need answers. Our bankers, however, have a different picture.

They just see the largest health insurer in California. A company with absolutely no debt. A company with \$1.2 billion in assets.

And since most of those assets are in cash and prudent long-term investments (as opposed to junk bonds and desert resorts), it makes those bankers feel very secure.

Which, come to think of it, is the same way we make our members feel.



**Blue Cross
of California**

WE MAKE THE SYSTEM WORK FOR YOU

Registered agent of the Blue Cross Association. SM is a service mark of Blue Cross of California.



How we look to
our bankers.



Official Sponsor
of the 1992
U.S. Olympic Team



One saves time. One saves California.



The next time you reach for a foam cup, remember this: styrofoam plastic is a material that never breaks down in a landfill.

Keep reusing glass and ceramic mugs instead. They don't create extra garbage. They don't litter the environment. And besides, they're a lot nicer to look at.

**WESTE
STAT
ADVERTISING
PARTNERS**

This shouldn't be the only place the elderly can turn for help.



Since 1975, Golden Gate Senior Services has been helping the elderly maintain independent, dignified, and meaningful lives.

We serve hot meals to those who may desperately need them. We provide help and advice with medical,

housing, financial, and tax problems. We have classes on everything from exercise to painting. And we fight for legislation that helps the elderly.

We can't, however, do it all alone. Your help is greatly needed.

Please call 415-621-1112

or write to 1350 Waller Street, San Francisco, CA 94117 as soon as you can.

After all, none of us is getting any younger.

GOLDEN GATE SENIOR SERVICES



If you ignore street kids long enough, they'll go away.

Every year, over 5,000 American children are buried in unmarked graves. They are street kids—scared, abused, desperate—who struggle every day just to survive in a vicious and violent world. For these children Larkin Street Youth Center is a haven. A safe place to go for food, clothing, medical care and professional counseling. But most of all, it's hope.

Please support Larkin Street's work.

Kids are dying for your help.

Larkin Street Youth Center
1044 Larkin Street, San Francisco, CA 94109
415-673-0911



Our
INTEREST IS NOT
IN HOW *FAST* AN
Investment Accelerates
BUT HOW WELL IT
Performs over Time.

TIME not *TIMING*. That's how we MAKE our INVESTMENT DECISIONS. While others might have an EYE for a QUICK RETURN, *54 years experience* has taught us that an investment CONSTANTLY NURTURED, and carefully steered, should *PAY OFF HANDSOMELY* in the LONG RUN. Something our 1.7 million *INDIVIDUAL INVESTORS* and over 200 INSTITUTIONAL CLIENTS *appreciate*.



A TIME - HONORED TRADITION
IN MONEY MANAGEMENT

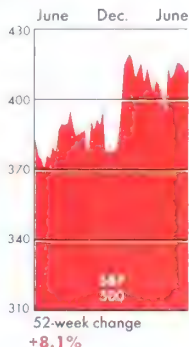
The Putnam Companies One Post Office Square, Boston MA 02109.

Investment Figures of the Week

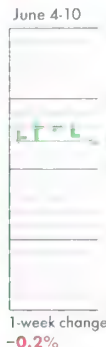
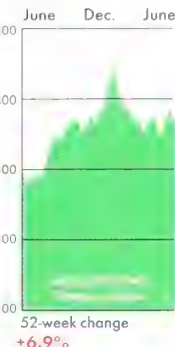
COMMENTARY

Every week in the financial markets, as economic worries cast a pall over both stocks and bonds. Dow Jones industrial average rose 14 points, to 3369, on June 9, as investors fretted about a possible rise in inflation. The decline was more severe among small companies and stocks traded in NASDAQ over-the-counter market. But the worry among OTC investors was not that inflation was rising, but that the economy had weakened and put a crimp in corporate profits.

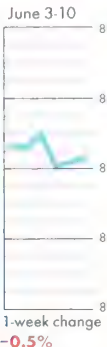
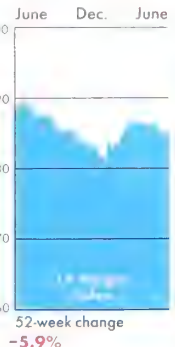
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	Week	% change 52-week
DOW JONES INDUSTRIALS	3343.2	-1.9	12.9
COMPANIES (Russell 1000)	215.0	-2.0	9.3
COMPANIES (Russell 2000)	195.0	-2.5	11.7
COMPANIES (Russell 3000)	229.2	-2.0	9.4

	Latest	Week	% change (local currency) 52-week
DOW JONES (FINANCIAL TIMES 100)	2646.1	-1.3	5.0
NIKKEI INDEX	17,742.9	-2.5	-27.5
TSE COMPOSITE	3368.6	-1.1	-5.3

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.77%	3.80%	5.7%
30-YEAR TREASURY BOND YIELD	7.90%	7.88%	8.5%
S&P 500 DIVIDEND YIELD	3.00%	2.98%	3.2%
S&P 500 PRICE/EARNINGS RATIO	24.9	25.4	17.9

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	410.0	408.7	Negative
Stocks above 26-week moving average	46.8%	51.8%	Neutral
Speculative sentiment: Put/call ratio	0.46	0.36	Positive
Insider sentiment: Vickers sell/buy ratio	1.95	1.98	Positive

INDUSTRY GROUPS

	4-week	52-week	Strongest stock in group	4-week	52-week	Price
INSURANCE	8.8	25.0	JEFFERSON PILOT	15.4	54.9	44
TELECOM	8.7	25.3	ARMCO	23.9	39.0	7 1/8
COMMOBILES	8.3	18.9	CHRYSLER	11.4	46.9	20 3/4
SEMI-CONDUCTORS	7.8	56.2	MATTEL	8.0	71.2	23 3/4
PHARMACEUTICALS	7.6	10.2	ASARCO	18.4	17.8	31 3/8
WEAKEST STOCKS	4-week	52-week	WEAKEST STOCK IN GROUP	4-week	52-week	Price
MANUFACTURED HOUSING	-24.2	-13.2	FLEETWOOD ENTERPRISES	-27.5	-14.1	27 3/8
SPECIALTY APPAREL RETAILERS	-16.2	-14.1	GAP	-23.7	3.4	32 5/8
RETAILERS	-15.0	20.0	REEBOK INTERNATIONAL	-26.4	2.2	23 3/8
HOSPITAL MANAGEMENT	-13.3	-40.8	HUMANA	-18.2	-37.7	20 1/4
DIAGNOSTIC HEALTH CARE	-11.5	1.1	ABBOTT LABORATORIES	-17.3	12.1	27 1/4

MUTUAL FUNDS

	%	LAGGARDS	%
4-WEEK TOTAL RETURN		4-WEEK TOTAL RETURN	
LIFE-STATE STREET GLOBAL ENERGY	7.9	SCHILD VALUE	-16.1
TECHNICAL STRATEGIES	6.7	STEADMAN OCEANOGRAPHIC TECHNOLOGY	-11.7
MONT	6.7	SCHILD AGGRESSIVE GROWTH	-9.1
52-WEEK TOTAL RETURN		52-WEEK TOTAL RETURN	
SELECT SAVINGS & LOAN	49.9	LEXINGTON STRATEGIC INVESTMENTS	-44.1
SELECT REGIONAL BANKS	49.1	UNITED SERVICES GOLD SHARES	-31.3
SELECT AUTOMOTIVE	46.3	LEXINGTON STRATEGIC SILVER	-28.9

RELATIVE PORTFOLIOS

	Treasury bonds	U. S. stocks	Foreign stocks	Money market fund	Gold
Amounts	\$11,566	\$11,169	\$10,802	\$10,405	\$9,089
Percent change	-0.07%	-0.83%	-0.99%	+0.06%	-0.12%

This page is as of market close Wednesday, June 10, 1992, unless otherwise indicated. Funds include S&P 500 companies only; performance and share prices are as of market close.

June 9. Mutual fund returns are as of June 5. Relative portfolios are valued as of June 9. A more detailed explanation of this page is available on request.

NEXT STOP IS VIETNAM

Surely one of today's bitterest ironies is the spectacle of Vietnam's sclerotic communist leaders blaming the U.S. for stifling Vietnamese capitalism. Men who fought against an open-market economy for years now complain that a U.S. embargo is stopping their conversion from state control to private commerce. The truth is that Vietnam has nowhere to turn but to the West. Communism has failed as an economic model, and the Soviet Union, once a financial benefactor, no longer exists. Once again, the end of the cold war is forcing a totalitarian country to grant a semblance of economic freedom to its people (page 48).

The Bush Administration has, so far, been right to hang tough. The embargo has been successful in finally forcing Hanoi in March to reverse its hardline position on POWs and MIAs. Yet the point is approaching when the benefits of lifting the embargo will exceed the costs. Promoting a market economy in Vietnam is in the long-term interest of the U.S., if only because a private economy will prove to be politically subversive to the communist regime, as it has been in China. The old communist leadership, however, will not give up political power easily, and a Tiananmen Square-type of crackdown in the future is possible. Corporate America, which is currently courting Vietnam with a passion, will have to take that political fact into consideration.

Other countries are stepping up trade with Vietnam. Japanese, Korean, and European companies are jockeying for position in what they hope will become Asia's fifth fast-growing tiger. U.S. corporations, fearing they may lose out to competitors, are anxious for the embargo to end. Coca-Cola, imported through independent Asian wholesalers, can be bought on the streets of Ho Chi Minh City. Accounting firm Ernst & Young's franchisee has gone so far as to post an "I love Hanoi" sign. But first, the embargo must be lifted to allow legal contracts to be signed. Then diplomatic relations can be restored, which will pave the way for aid. Washington is likely to wait for the November elections to be over before acting. With Hanoi cooperating on the POW/MIA issue, resuming trade will be a big step toward finally ending America's long Vietnam agony.

BILL McGOWAN NEVER LET UP

Avisionary, yes. An industry leader, yes. But more than anything, MCI Communications Corp. Chairman William G. McGowan was a scrapper. When the government was slow to let MCI into new markets, he found a way around it. When AT&T tried to stop him, he sued it.

And when his heart failed in late 1986, he simply got another one and went back to work. Dogged to the end, McGowan died on June 8 at age 64 when his second heart

failed as he entered the hospital for his thrice-weekly exercise program.

Now that MCI is a respectable \$8.4 billion-a-year company, it's easy to forget that McGowan's scrappiness was once equated with dangerous radicalism. In the 1970s, AT&T ran a government-blessed monopoly whose rates were carefully balanced to meet social goals, not to maximize profits. Long-distance callers paid steep rates to subsidize cheap local phone service. Regulators—and Bell herself—feared that letting MCI attack the lucrative long-distance market would topple the delicate structure. Indeed, McGowan himself assured regulators that all he wanted to do was offer private lines for intracompany communications. But in 1975, he slipped through a regulatory loophole and entered the long-distance market with a service called Execunet.

McGowan insisted to the end that he never intended to mislead regulators, but gleefully agreed that he never backed down from a good fight. His unrelenting legal market attack on mighty AT&T helped bring competition to national telephone monopolies that, generally speaking, were fostering lower rates and better service around the world. Bill McGowan, the son of a railroad engineer with the face of a hound dog, was a fighter of the highest order.

CEO PAY: RIGHT ISSUE, WRONG APPROACH

In an election year, executive pay was bound to be an issue that would not go away. Sure enough, it cropped up again when the House of Representatives voted June 10 to revamp the unemployment insurance system. To a far expanded unemployment benefits, legislators recommended a proposal to prevent corporations from taking a deduction on pay to any officer in excess of \$1 million. The cap, effective Jan. 1, 1992, includes stock option gains, bonuses, and perks. The intent of the proposal is simple: to rein in runaway executive compensation. Last year, average CEO pay jumped by 26%, to a record \$2,466,292—in a recession-plagued year in which aftertax corporate profits slid 4.5% and hundreds of thousands of employees lost their jobs. The big rise confirmed the view that CEO pay was undermining competitiveness, fairness, and leadership in U.S. corporations.

Yet people who sincerely believe a legislated fix can solve the problem of ever-escalating pay are only kidding themselves. Controlling pay by taxation would lead to higher costs for shareholders—not less money for corporate executives. Many companies would simply foot the bill for the tax just as many did for the golden parachutes of the 1980s. The place to stop outsized CEO pay raises and perks is in the corporate boardroom—not in the halls of Congress. Directors must challenge the pay packages so willingly handed out by the boss; they must demand that pay be linked to performance, and they must focus far more attention on how CEO's compensation relates to what other workers in the company receive for their labor. This is an issue of corporate governance, not corporate taxation.

Why Keep Up With The Joneses
When You Can Avoid Them Altogether.



Jeep® Cherokee Laredo

There's Only One Jeep...
Advantage: Chrysler

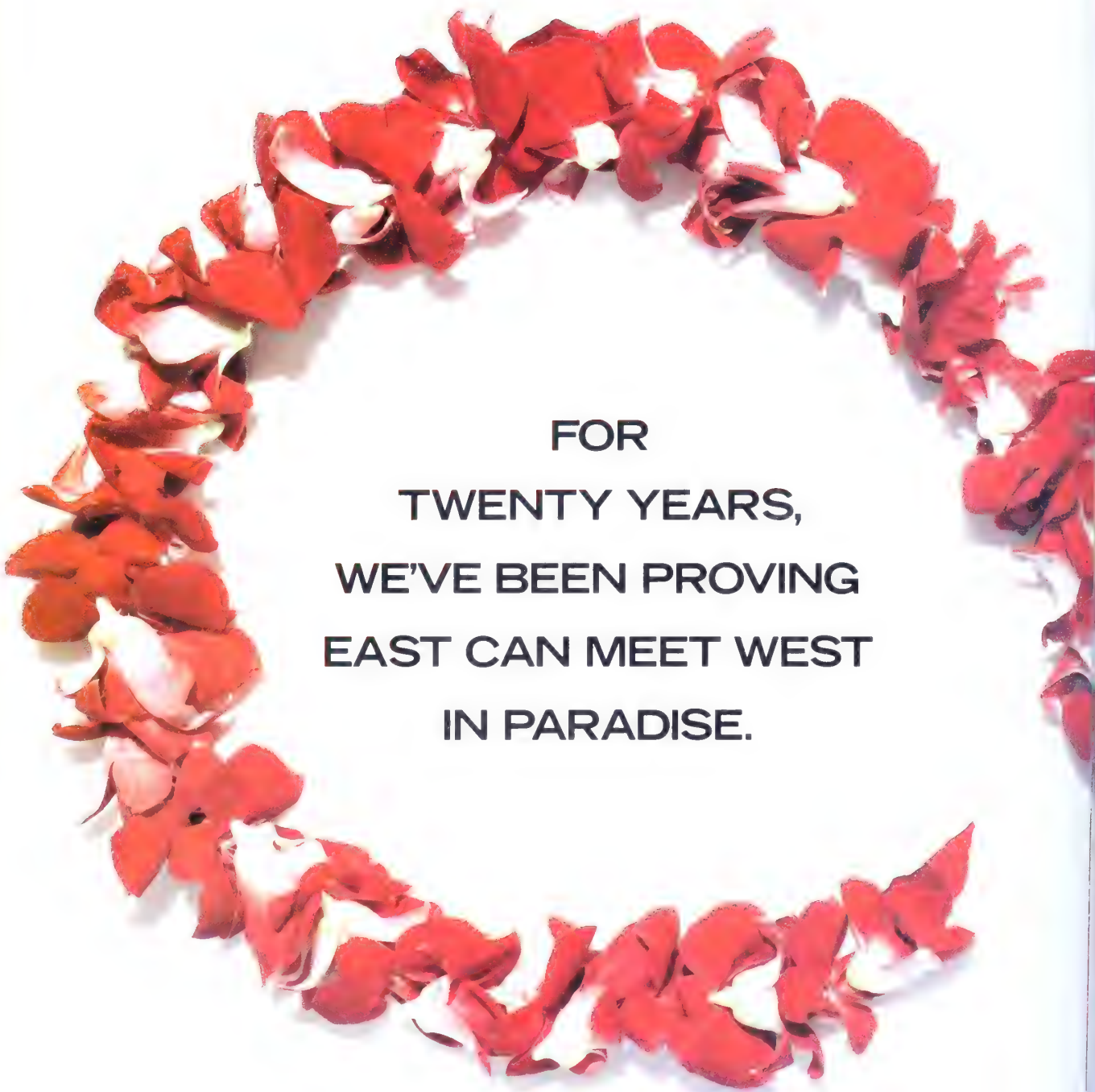


Chrysler's new Owner's Choice Protection Plan for 1992 models includes: 7-year/70,000-mile powertrain protection or 3-year/36,000-mile bumper-to-bumper warranty. Your choice. And with no deductible. See limited warranties, restrictions, and details at dealer. Excludes normal maintenance, adjustments, and wear items. For further information, or how to buy or lease one, call 1-800-JEEP-EAGLE. Jeep is a registered trademark of Chrysler Corporation.

Buckle up for safety.

OFFICIAL SPONSOR OF THE 1992 U.S.A.
U.S. OLYMPIC TEAM 36 USC 380





**FOR
TWENTY YEARS,
WE'VE BEEN PROVING
EAST CAN MEET WEST
IN PARADISE.**

ANNUAL SCOREBOARD PEOPLE DAVID GEFFEN'S LATEST GIG STRATEGIES APPLE IN JAPAN KKR'S NEW THRUST

SS WEEK

June 29

BusinessWeek

3 9042 03140435 0

29, 1992 A McGRAW-HILL PUBLICATION \$2.75

DETROIT'S BIG CHANCE



BURLINGAME
JUN 19 1992
LIBRARY ✓

WILL IT KEEP WINNING BACK CUSTOMERS FROM JAPANESE RIVALS?

94010-4083
BURLINGAME CA
480 PRIMROSE RD
BURLINGAME PUBLIC LIBRARY
0602 105811160 DEC92 104 2254
94010 *****5-DIGIT
43675

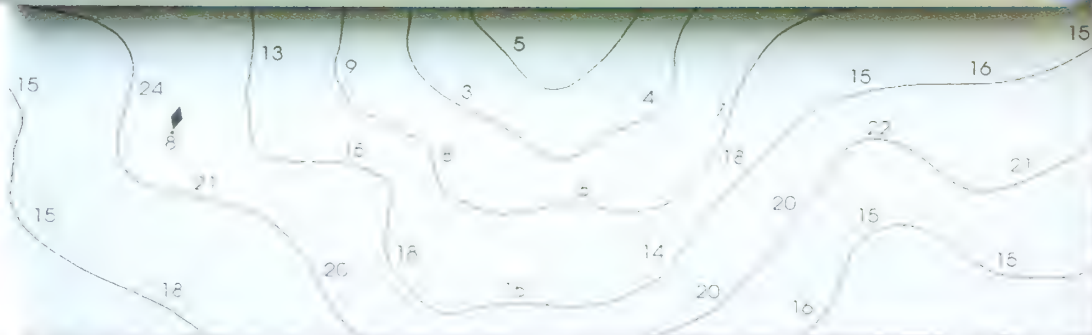




INVOLVES.

Wherever Hitachi is located, we work at being a committed part of the community. That's because we believe the purpose of technology is not simply to make clever products. It is also to discover, to nurture and to be involved in order to achieve a basic goal: A better world for succeeding generations. This is the operating philosophy behind the 20,000 different products made by our 500 manufacturing companies around the world. It has been our commitment for the past 80 years. And even more important, it is our definition of the future.

HITACHI



Derivatives may look confusing on the surface, but their underlying logic is compelling and clear. At J.P. Morgan we present all the alternatives to help our clients choose the course that's best for them.

Exploring the uses of derivatives should be satisfying, not mystifying.

Derivatives don't make risk disappear, but they do make it possible to exchange a risk you'd rather not take for one you're more willing to accept. Options, swaps, and other derivatives are simple in essence, but since they're so versatile, evaluating their various uses can be complex. That's especially true with newer derivatives linked to commodity and equity indices. But it's not our style to magnify complexity. Our success has always been based on helping clients think through every situation fully and clearly. Then we draw on the technical resources of our global network to design the specific tactic that fits your particular strategy. By taking the mystery out of derivatives, we make it easier to take advantage of these important financial tools. It's a key reason we've become a leader in the full range of risk management products.



PLENTY OF CHOICES: BUT IN TERMS OF PRICE, QUALITY, AND FEATURES, IT HAS NEVER BEEN EASIER TO BUY AMERICAN

Cover Story

82 DETROIT'S BIG CHANCE

As car sales rise along with the U. S. economy, GM, Ford, and Chrysler are starting to score big against the Japanese. Detroit has enjoyed other upticks, however, and it blew each opportunity to reclaim business and respect lost in the past 20 years. But this time, the case for a long-lasting rebound is surprisingly persuasive

85 LIGHT TRUCKS' HEAVY SALES

How a new generation of Detroit slams

88 TROUBLED WINNER

Seville has lots of fans—and foibles

Top of the News

32 APPLE BLOSSOM TIME

Its mission to win over Japan looks to be right on target

34 A HANDSHAKE, BUT NO PROMISE

Bush didn't bail out Yeltsin—and U. S. companies are balking, too

34 THE RUSSIANS ARE HERE

Seventy budding capitalists joined Yeltsin. Their goal: To make money

35 DEMOCRATIC AGENDA-BENDERS

A pack of House conservatives are worsening the legislative gridlock

36 A CANADIAN MCI?

Its long-distance market is opening up—and entrepreneurs are pouncing

37 OH, WHAT A LOVELY FARE WAR

Who's profiting? Almost everybody

38 SEARS BLOWS A GASKET

Did a push for profits lead to fraud?

39 BEAUTY AND THE BEASTLINESS

Angry shakeup at Elizabeth Arden

39 THE DAN RATHER CAPER

A book exposes his credit file

40 MAGIC'S BLOCKED SHOT

Some retailers have banned his book

42 COMMENTARY

Black athletes should speak up

44 IN BUSINESS THIS WEEK

Perot and free trade, Tyco Toys, Intel wins a case, IBM, what's in a name, *Batman* and lingerie

International Business

50 JAPAN

Its export surplus is widening—and so far, the U. S. isn't complaining

51 JAPAN

College grads face a tougher time

54 BRITAIN

Wasserstein tries to salvage an LB

55 INTERNATIONAL OUTLOOK

Why Israeli business is so fed up

Economic Analysis

16 ECONOMIC VIEWPOINT

Blinder: Rio lacked common sense

25 ECONOMIC TRENDS

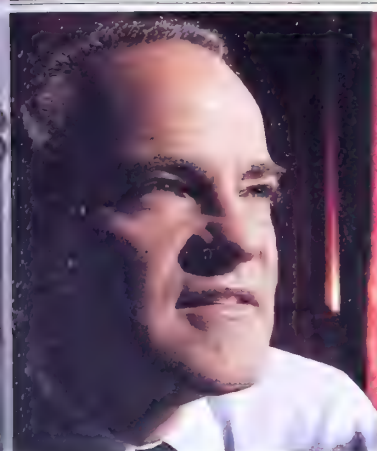
Temp jobs rising, commercial real estate, Third World growth may soar, car sales and Bush's chances

29 BUSINESS OUTLOOK

Sure, it's a tortoise recovery. That's what's good about it

92 FAMILY AFFAIR

A rise in single-parent homes has dire implications for the economy



LEVERAGED BUILDUPS:
LBOs SAW THEIR BEST DAYS LONG
AGO, SO KKR IS PANNING FOR NEW
GOLD WITH NEW KINDS OF DEALS IN A
FEW OUT-OF-FAVOR INDUSTRIES

104 MORE BANG FOR THE BUCK?
U.S. RESEARCH AND DEVELOPMENT IS
STILL PLODDING, BUT BUSINESS
WEEK'S ANNUAL SCOREBOARD
REVEALS SOME PROGRESS, TOO

62 DAVID GEFFEN'S NEW GIG:
HE MADE \$1 BILLION PRODUCING
ROCK 'N' ROLL RECORDS. NOW, HE'S
OUT TO ROCK THE BUTTON-DOWN
BUSINESS WORLD

Government

WASHINGTON OUTLOOK

Perot's foes have begun the search
for his Achilles' heel

Media

HOTTER AIRWAVES

New FCC rules will likely let radio
station owners buy more properties

People

SO LONG, ROCK 'N' ROLL?

Rock 'n' roll's biggest Rolodex isn't
enough for David Geffen. Now, he
wants to go corporate

Marketing

NEW LIFE FOR THE PILL

Drug marketers are targeting
women on the verge of menopause

Information Processing

IBM'S MASSIVE EFFORT

It pushes into supercomputing to
keep its commanding lead in
commercial data processing

BIG QUESTIONS FOR TV ANSWER

The interactive-TV outfit's ads irked
the FCC, and rivals are gaining

The Corporation

TURNING THE TABLES AT BALLY

Arthur Goldberg's turnaround is
riching ahead, but it's no sure thing.
Bondholders are still nervous

93 PLATINUM LOOKS GOLDEN

The software maker is carving
a cozy niche in IBM mainframe
data-base programs

Finance

96 KKR: A SLOWER GAME

Less debt, less action, but its new
strategies are breaking fresh ground

98 A ROUT IN DRUG STOCKS

The massacre is far from over, and
even the top companies face trouble

99 COMMENTARY

Color-blind credit: How the banks
can do a better job



32 MACS AND MUGS:
APPLE COMPUTER, PLUGGED IN
SOLIDLY IN JAPAN, IS EXPLOITING ITS
POPULARITY THERE IN DOZENS OF
WAYS—AND THAT SPELLS PROFITS

100 INSIDE WALL STREET

Healthdyne: The right prescription?
Scott Paper could be ready to roll
U. S. Shoe may have found a good fit

133 INVESTMENT FIGURES OF THE WEEK

Science & Technology

103 DEVELOPMENTS TO WATCH

IBM's chips, ozone aid, fruit flies,
cleaning 'radwaste,' glass stitches

R&D Scoreboard

104 THE KEY WORD IS 'EFFICIENCY'

Corporate America's research
crunch continues, but there are
hopeful signs

Personal Business

126 INVESTING: Divining market trends

INVESTING: What the stars divulge

HOME: Color this paint green

INSURANCE: Filling medicare's gaps

TRAVEL: Leave the jet lag behind

Features

6 BUSINESS WEEK INDEX

7 READERS REPORT

10 CORRECTIONS & CLARIFICATIONS

14 BOOKS

131 INDEX TO COMPANIES

134 EDITORIALS

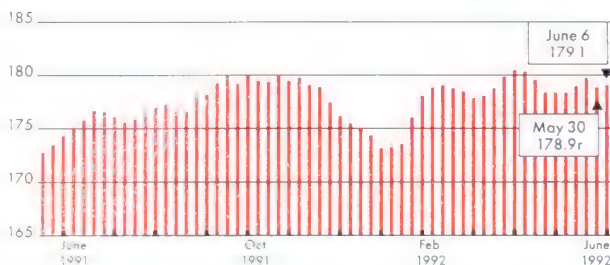
Finding the right mix of R&D
Step on it, Detroit
Investing in the children

BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 2.3%

1967=100 (four-week moving average)

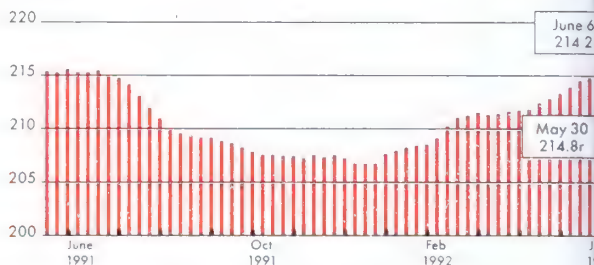


The production index increased during the week ended June 6. On a seasonally adjusted basis, rail-freight traffic and output of steel, electric power, crude-oil refining, and paper increased. Auto production was down sharply, and truck, coal, paperboard, and lumber output fell as well. Before calculation of the four-week moving average, the index rebounded to 180.1, after plant closings for the Memorial Day weekend caused the index to fall to 175.5 in the previous week.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: 0.3%
Change from last year: -0.5%



The leading index dropped slightly during the week ended June 6. Growth in the money supply turned negative for the week, and materials prices deteriorated. However, stock prices were higher, and the growth rate of real estate improved. Bond yields and the number of business failures were virtually unchanged from the previous week. Before calculation of the four-week moving average, the index fell to 212.7, from 213.4.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	Change year ago
STEEL (6/13) thous. of net tons	1,753	1,785#	8.3
AUTOS (6/13) units	129,204	136,576r#	9.1
TRUCKS (6/13) units	95,512	87,711r#	20.9
ELECTRIC POWER (6/13) millions of kilowatt-hours	58,239	54,426#	-3.0
CRUDE-OIL REFINING (6/13) thous. of bbl./day	13,952	13,930#	-0.3
COAL (6/6) thous. of net tons	18,709#	16,957	-2.0
PAPERBOARD (6/6) thous. of tons	807.2#	821.7r	4.0
PAPER (6/6) thous. of tons	781.0#	749.0r	5.1
LUMBER (6/6) millions of ft.	494.9#	420.3	-7.9
RAIL FREIGHT (6/6) billions of ton-miles	20.6#	18.7	8.4

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWP, SFP, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/17)	127	128	139
GERMAN MARK (6/17)	1.57	1.59	1.80
BRITISH POUND (6/17)	1.86	1.83	1.63
FRENCH FRANC (6/17)	5.30	5.36	6.12
CANADIAN DOLLAR (6/17)	1.20	1.19	1.14
SWISS FRANC (6/17)	1.42	1.45	1.54
MEXICAN PESO (6/17)	3,105	3,101	3,014

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	Change year ago
GOLD (6/17) \$/troy oz.	342.000	337.650	-6.9
STEEL SCRAP (6/16) #1 heavy, \$/ton	88.50	88.50	-0.6
FOODSTUFFS (6/15) index, 1967=100	200.8	204.0	0.5
COPPER (6/13) ¢/lb	106.4	106.6	2.5
ALUMINUM (6/13) ¢/lb	59.1	60.5	1.0
WHEAT (6/13) #2 hard, \$/bu.	4.16	4.04	37.7
COTTON (6/13) strict low middling 1-1/16 in., ¢/lb.	58.30	55.38	-26.5

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year
STOCK PRICES (6/12) S&P 500	409.90	414.43	
CORPORATE BOND YIELD, Aaa (6/12)	8.26%	8.24%	
INDUSTRIAL MATERIALS PRICES (6/12)	98.4	98.0	
BUSINESS FAILURES (6/5)	435	434	
REAL ESTATE LOANS (6/3) billions	\$400.8	\$400.7	
MONEY SUPPLY, M2 (6/1) billions	\$3,416.3	\$3,433.1r	
INITIAL CLAIMS, UNEMPLOYMENT (5/30) thous	407	407	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year
INDUSTRIAL PRODUCTION (May) total index	108.8	108.1r	
CAPACITY UTILIZATION (May)	79.0%	78.7%	
CONSUMER PRICE INDEX (May)	139.7	139.5	
PRODUCER PRICE INDEX (May) finished goods	123.0	122.5	

Sources: Federal Reserve Board, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year
MONEY SUPPLY, M1 (6/1)	\$958.6	\$951.1r	
BANKS' BUSINESS LOANS (6/3)	284.0	283.9r	
FREE RESERVES (6/10)	330	1,337r	
NONFINANCIAL COMMERCIAL PAPER (6/3)	144.2	144.2	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed two-week period in millions)

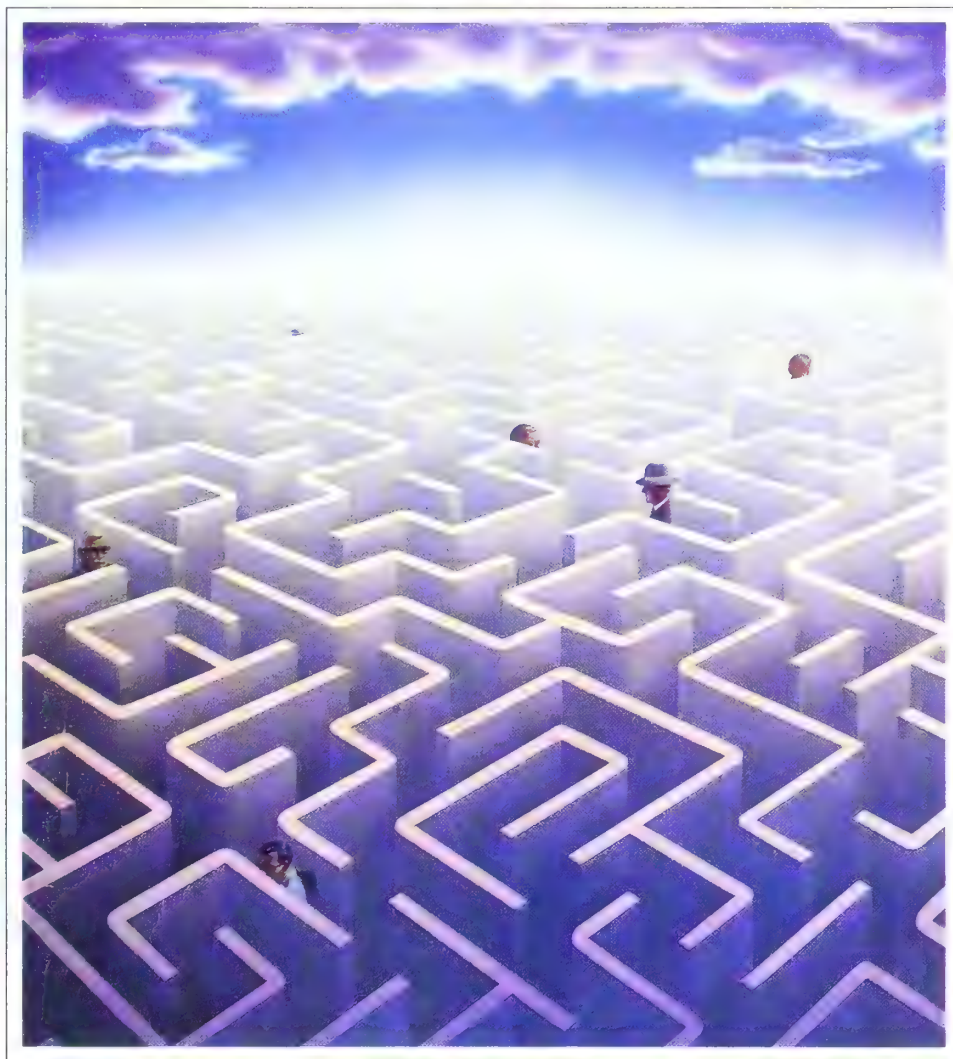
MONEY MARKET RATES

	Latest week	Week ago	% Change year
FEDERAL FUNDS (6/16)	3.74%	3.57%	53
PRIME (6/17)	6.50	6.50	80
COMMERCIAL PAPER 3-MONTH (6/16)	3.93	3.93	62
CERTIFICATES OF DEPOSIT 3-MONTH (6/17)	3.82	3.86	62
EURODOLLAR 3-MONTH (6/13)	3.86	3.94	63

Sources: Federal Reserve Board, First Boston

#Row data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

A JOURNEY INTO THE WORLD OF INTERNATIONAL COMMERCE HAS ITS TWISTS AND TURNS



A company that wanders unguided into the labyrinth of international trading may find an intricate journey ahead of it. Samsung Co. has traveled the paths to the world's market place for over fifty years gathering valuable experience, to make it the ideal guiding partner for any company wishing to navigate safely past the dead-ends and pitfalls lurking along the tangled routes to international business success. Let Samsung be your guide through the labyrinth.

SAMSUNG CO., LTD.

C P O BOX 1144 SEOUL, KOREA TEL 751-2114 TELEX. STARS K23657 FAX: 751-3440

DUMMIES TESTED IT, TECHNICIANS CON



YOU'RE SAFER IN A SAAB.

As most carmakers know, there's a limit to how far you can trust a dummy.

For that reason we felt reassured when in March 1992, Sweden's largest insurance company, Folksam, announced evidence gathered from one million real life accidents.

This irrefutable verdict states for the second time, that people travelling in a Saab 9000, received fewer injuries.

And yet, some people go to even greater lengths to establish which car is really the safest.

One of Great Britain's consumer organizations assessed the safety of cars by dismantling them in order to study safety aspects of their design.

At the top of the list, after merciless scrutiny of around 200 different cars, was the Saab 9000.

These testimonials combined, probably justify calling the Saab 9000 the safest car in the world.

Tangible proof of Saab's leadership in combining safety systems such as energy absorbing crumple zones, protective safety cage, belt tensioners and side-impact protection.

AND IT, REALITY PROVED IT:



What these accidents studies don't reveal, is
Saab's leadership in another aspect of safety:
the ability to stay out of trouble in the first

Saab keeps you constantly up-to-date with
what's happening between the wheels and the
chassis, information instantly communicated
through chassis and driver's seat, giving maxi-
mum time to react.

Response is immediate whatever the
conditions.

ABS and Saab's unique Traction Control system
add even more stability.

All this makes for a more alert driver, which is
the starting point of the Saab design philosophy.

From whatever perspective, you have to be
safer if you are travelling in a Saab.



SAAB

America's top 500 service companies

America's top 50 diversified financial companies.

American Express	Freddie Mac	Chubb	Geico
Federal National Mortgage Association	Loews	St. Paul	Old Republic
Salomon	American General	General Re	International
Aetna Life & Casualty	Transamerica	Reliance Group Holdings	GATX
Merrill Lynch	Bear Stearns	Safeco	Ohio Casualty
CIGNA	Household International	Aon	Hanover Insurance
American International Group	Lincoln National	Beneficial	Alexander & Alexander
Travelers Corp.	Primerica	First Empire State Corp.	Services
Morgan Stanley Group	Paine Webber Group	Discount Corp.	Progressive
ITT	Capital Holding	of New York	Cincinnati Financial
Student Loan Marketing Association	Continental	Amibase	Marsh & McLennan
	USF&G	Alleghany	Leucadia National
	Kemper	Unitrin	Landmark Land
	Fund American	Charles Schwab	Lomas Financial

America's top 20 diversified financial companies.

American Express	CIGNA	Student Loan Marketing	Bear Stearns
Federal National Mortgage Association	American International Group	Association	Household International
Salomon	Travelers Corp.	Freddie Mac	Lincoln National
Aetna Life & Casualty	Morgan Stanley Group	Loews	Primerica
Merrill Lynch	ITT	American General	Paine Webber
		Transamerica	Group

Freddie Mac earned a spot at the top of this list by making a profit 21 years in a row. How did we do it? By buying mortgages from lenders, and packaging them as mortgage securities to sell to investors. That keeps funds flowing, makes financing more available and affordable, and helps more Americans realize the dream of owning a home.

Freddie Mac, 8200 Jones Branch Drive, Mail Stop 405, McLean, VA 22102



© Freddie Mac 1992
Source: FORTUNE magazine, June 3, 1991

Israel Discount Bank	Ryder System	Browning-Ferris Industries	Comdisco	Intelligent Electronics
of New York	Humana	Enserch	PHH	Turner Broadcasting

IN-CHIEF: Stephen B. Shepard
ING EDITOR: John A. Dierdorff
CONOMIST: William Wolman
ANT MANAGING EDITORS:
 J. Dowling, Mark Morrison, G. David Wallace
RECTOR: Malcolm Frouman
EDITORS: Bob Arnold, Robert Barker, Frank J. Comes, H. Dobrzynski, Marc Frons, Geoff Lewis, G. Scott, N. Vamos, Lee Walczak (Washington), Chris Welles, ur Zucker
IAL PAGE EDITOR: John E. Plueneke
IF CORRESPONDENTS: Keith G. Felcyn
ATIONAL EDITOR: William J. Holstein (Editor), Elizabeth (Sr. Editor)
WRITERS: Anthony Bianco, John A. Byrne, James E. Ellis go, William Glasgall, Gene G. Marcial, Bruce Nussbaum, earson, Karen Pennar, Otis Port
ATE EDITORS: Duane E. Anderson, Catherine Arnst, A. Depke, Amy Dunkin, Peter Finch, Jeffrey M an, William D. Marbach
OR EDITORIAL OPERATIONS: Thomas J. Reed
EDITOR: Lawrence Lippmann
ART DIRECTOR: Laura Baer
OF SYSTEMS: Claire Conte Worley
ICES: James C. Cooper (Sr. Economist/Business Outlook ed- hleen Madigan (Assoc.), Christopher Farrell, Michael J. Mandel nics editors) Gene Koretz (Economic Trends editor)
MENT EDITORS: Books: Denise Demong Corporate Fi- Larry Light Industries: Thane Peterson Information Pro- John W. Venty International Editor: Joyce Barnathan ional News: Peter Galuszka, Stanley Fried Investment ig: Leah Nathans Spiro Legal Affairs: Michele Galen ing: Christopher Power Markets & Investments: Gary Media: Mark Landler Money & Banking: John Meehan rams Collingwood. People: Michael Oenal Personal Busi- onald H. Dunn, Joan Warner Score: Emily T. Smith Score- : Fred F. Jespersen Social Issues: Troy Segal Technol- bert Buder Telecommunications: Peter Coy Trans- Andrea Rothman The Workplace: Aaron Bernstein
ITORS: Naomi Freundlich, Evan I. Schwartz, Ron Stodhill II, uby, Suzanne Woolley, Laura Zinn Paul M. Eng (Asst editor)
ITORS: Harry Maurer, Michael Mercuro (Deputy chiefs), e Growther, (Asst chief), Tim Belknop, Aleta Kaufman, Marc ack Robbins, Jim Talb (Sr. copy editors), Pam Black, Carl Hardy Green, Cynthia McClean, David Pengilly, Malka Percal, oyal, Dalia Kandyoti (Asst copy editor), Gail Fowler, Aida Eva Stettner (Researchers)
CTION COPY EDITORS: Donald Halsband (Chief), Hallberg dsson, Celine Keating, Robert S. Norman, Lawrence Dark, M Romanoff
 even Taylor (Deputy director), Cynthia Friedman, Francesca Jay Petrow (Assoc. directors), Alice Cheung, Craig Socia irectors) Graphics: Arthur Eves (Director), Joan Danaher irector), Rob Doyle (Sr. Illustrator), Laurel Daunis, Mena, Ray Vella (Illustrators), Jame Beauchamp (Computer roduction: Stephen J. Romeo (Mgr)
**ie Sue Bloom (Deputy Picture editor), Todd James, Scott Mlyn, Weil (Assoc. Picture editors), Anne Murray (Asst editor) y Daly (Researcher) Bettina Baudoin (Researcher - Paris) ark (Traffic), Lawrence Crowe (Librarian)
IAL OPERATIONS: Richard Balestrino, A. Peter Clem, Yvonne z (Production managers) Thomas R. Dowd, Sharon L. Eng, e, Jose L. Martin, Jane M. Perkinson, Craig Sturgis, Karen se V. Walton, Nicholas White (Makeup editors), Dale I. Arnold, ndicy, Edgardo Torres (Asst makeup editors), Donald C. (Traffic manager), Bruce M. Arnold, Leo Corbie (Production
PONDENTS: Atlanta: Chuck Hawkins (Mgr.), Walecia Konrad, G. Gary McWilliams, Geoffrey Smith, Chicago: David Greising (Mgr.), Julia Flynn, Kevin Kelly, Lois Thierlein Cleveland- Schiller (Mgr.) Connecticut: Lisa Dinscoll Dallas: Wendy (Mgr.), Stephanie Anderson Forest Detroit: Kathleen Kerwin James B. Treece (Sr. Correspondent), David Woodruff Los s: Ronald Grover (Mgr.), Larry Armstrong (Sr. Correspondent), hne Miami: Gail DeGeorge (Mgr.) Philadelphia: Joseph (Mgr.) Pittsburgh: Michael Schroeder (Mgr.), Maria Mallory ancisco: Russell Mitchell (Mgr.), Richard Brandt, Joan O'C i, Robert Hot, Kathy Rebello Seattle: Don Jones Yang (Mgr.) gton: Stephen H. Wildstrom (Sr. News Editor), Stan Grock ictor), Amy Bortnick, Brian Branner, John Carey, Paula Dwyer, ust, Susan B. Garland, Howard Gleckman, Douglas Harbrecht, ong, Mark Lewyn, Paul Magnusson, Mike McNamee, Tim atherne Yang Christina Del Valle (Asst editor) Bonn: John nan (Mgr.), Gail Schares Hong Kong: Pete Engardo Lon- hard A. Melcher (Mgr.), Mark Maremont Mexico City: Baker (Mgr.), Moscow: Rose Brady (Mgr.) Paris: Stewart (r.), Bill Javetski, Jonathan B. Levine Rome: John Rossant Tokyo: Robert Nelf (Mgr.), Neil Gross, Ted Holden, Karen iller Toronto: William C. Symonds (Mgr.)
IAL SERVICES: Broadcasting: Ray Hoffman Business r: Barbara Boynton Information Services: Jude T. Hayes i, Judi Crowe (Asst editor), Fred Katzenberg, Elisa S die E. Krupnick, Xuan Soong Office Manager: Roselyn ublic Relations: Christine Summerson Josephine Coppola s Report: Zenobia Brown Reprint Permission: Lawrence Systems: Ina L. Kichen (Mgr.), Courtenay Eddy
IER: John W. Patten
OPERATIONS: Gary B. Hopkins
ADVERTISING SALES: Karl A. Spangenberg
ERNATIONAL: Gerd Hnske
CULATION: Kitty Carroll Williams
ECTOR OF MARKETING: Cara Erickson
LES: Constance E. Bennett (San Francisco), G. Jarvis Coffin ic Region), Dan Dunn (Chicago), Molly F. Ford (Northeast- ion)
LLER: Gary M. Singer
IR, ADVERTISING BUSINESS: Linda F. Carvalho
IR, PRODUCTION: Mario J. Talluto**

THEY'VE COME A LONG WAY, LATELY. OR HAVE THEY?

After reading "Corporate women" (Cover Story, June 8), I found it very revealing to review the tenure of the "50 top women in business." Thirty-eight of those women have been in their jobs less than five years, and 16 of them one year or less. We still have a long way to go!

Mary Claire Ryan
Wilmette, Ill.

Progress? Not! Having graduated and entered Corporate America three years ago, I am angered by how much sexual discrimination women must deal with from male clients, colleagues, and superiors (who just happen to be all men at my company). Recapping my introduction as project manager of a recent market-research study covering utility power equipment:

Account executive to the client (a senior vice-president at a multibillion-dollar company): "The project manager who will be overseeing the research team, coordinating information expectations, progress, and ultimately the conclusions recommendations for this project will be Patty Babal." To which the client replied: "Patty? He goes by Patty?"

Patty Babal
McLean, Va.

LIFE INSURANCE IS NOT A COMMODITY

Referred to "No-load life insurance: A bigger bang for your buck" (Personal Business, May 25), those wide-smiling, no-load insurance advocates are withholding a little secret: Most no-load life products do not have a track record of costing less than full-commission life insurance over the long term.

If you look at the net surrender cost, as computed by A. M. Best for 10- and 20-year periods, you will find that historically, the lowest-cost life insurance products are sold by traditional companies that have economies of scale.

Further, it is a mistake to confuse initial cost with true value. Life insurance is not a commodity. Consumers value

the knowledge and care that a trained professional agent adds to the purchasing and servicing of insurance. Quality varies among products and companies—as well as among agents and financial planners.

Lawrence L. Grypp
Executive Vice-President
Insurance & Financial Management
MassMutual
Springfield, Mass.

WILL DETROIT BLOW IT AGAIN?

I will find it amazing if Detroit doesn't once again shoot itself in the head ("Japan's sudden deceleration," Top of the News, June 8). The Big Three have had several opportunities in the past two decades to win back market share from Japanese imports. Each time, they opted to raise short-term profits by raising prices. Each time, the Japanese came back to win more share.

Now, the Big Three have the federal government providing more help to get the Japanese to back off "for a little while" as General Motors, Ford Motor, and Chrysler get their acts together. Will they concentrate on regaining market share, or will they once again raise prices to pad their bottom lines in a self-destructive search for short-term gain? Based on historical data, I expect the latter. As a result, the American consumer will be skinned out of billions of dollars to pay for both Japanese and American cars, and then the American taxpayer will be forced to pay more to help defray unemployment costs.

Michael Williams
Columbia, Mo.

JAPAN'S TEAM DOESN'T BELONG IN CHRYSLER'S HUDDLE

In five years of living in Japan, I have learned from the Japanese to play it close to the vest, be thorough, plan well in advance—and that business is war. So as a career marketing person and a Chrysler shareholder, I find it disconcerting, to say the least, that Chrysler would reveal its marketing plans in rough form, thereby allowing the competition to preempt or devise a counterof-

BUSINESS WEEK
JUNE 29, 1992 ***3272
ISSN 0007-7135



Publication weekly, except for one issue in January, by McGraw-Hill Inc., Lawrence, Kansas 66044-1991.
 Copyright © 1992 McGraw-Hill Inc. All rights reserved.
 Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 129, Hightstown, N.J. 08520, so that we can deliver your copy on time.
 Telephone: (212) 512-2000. Domestic Telex: 127960, International Telex: 232965. Cable: McGraw-Hill New York, TWX: 710-381-4879.
 Second-class postage paid at New York, N.Y., and at additional mailing offices.
 POSTMASTER: Send address changes to BUSINESS WEEK, P.O. Box 129, Hightstown, N.J. 08520.
 Photocopy permission: Where necessary, permission is granted by the copyright owner for those registered with the Copyright Clearance Center (CCC), 27 Congress St., Salem, Mass. 01970, to photocopy any article herein for the flat fee of \$1.50 per copy of each article. Send payment to the CCC. Copying for other than personal or internal reference use without express permission of McGraw-Hill is prohibited. Address requests for customized bulk reprints to Business Week Reprints, P.O. Box 457, Hightstown, N.J. 08520, or call 609 426-5494. ISSN 0007-7135/92/\$2.75

European Circulation Center, McGraw-Hill House, Maidenhead, Berks, England, SL6 7LN, U.K.
 Postmaster: Please send address changes to BUSINESS WEEK, P.O. Box 129, Hightstown, N.J. 08520, so that we can deliver your copy on time.
 P.Q. Registration Number 9010. Registered for GST as McGraw-Hill Inc. GST #R123075673. Copyright © 1992 by McGraw-Hill Inc. All rights reserved. Title registered in U.S. Patent Office.

Officers of McGraw-Hill, Inc.: Joseph L. Donnell, Chairman, President and Chief Executive Officer, Robert N. Landes, Executive Vice President, General Counsel, and Secretary, Harold W. McGraw, III, Executive Vice President, Frank D. Pengelase, Senior Vice President, Treasury Operations.

Because

BIG

Introducing the **AT&T MEGACOM® FAMILY OF SERVICES**

If you're a bigger company, one that spends between \$3,000 and \$30,000 a month on long distance, AT&T now offers a unique and exciting choice of services: the AT&T Megacom Family.

Megacom® Plus* Service and Megacom® Optimum Service are the *newest* members of the family for single- or multi-location businesses. Like Megacom® Service and Megacom® 800 Service, they can give you all the reliability, service, and flexibility you need—at very competitive prices.

If you're a bigger business, take a minute to find out which Megacom service meets your needs best. Sign up before 10/15/92 and you'll receive free installation.**

AT&T MEGACOM PLUS

A new outbound service, with additional savings and a choice of features, intended especially for companies with multiple locations of all sizes.

- Combine calls from all your locations, including domestic, AT&T Calling Card, international and U.S. Direct® calls, into one bill—available in a choice of billing formats: PC disk, magnetic tape, or hard copy.
- Spot trends and identify potential calling fraud with the optional PC billing package. Select from 56 standard reports or customize your own.
- Features the advanced maintenance service option, MegaWatch,SM which proactively monitors your service and equipment to help keep your business up and running.
- Volume and term plan discounts available for even greater savings.

More choices for bigger businesses. Because one size does not fit all.

ER

comes in many sizes.

Businesses bigger than the family store, but smaller than the FORTUNE 1000.

AT&T MEGACOM OPTIMUM

For single- or multi-location businesses, this service is the "gold standard," offering all the features included in Megacom Plus, and more, with the highest level of outbound service and support available from AT&T.

Features a dedicated 24-hour customer support center to handle your long distance operation, installation, and maintenance.

Includes the standard PC billing package. Choose your own bill format, even CD ROM, to give you incredible flexibility.

Choice of 20 different billing dates. Choose the one that best fits your company's cash flow.

Includes state-of-the-art monitoring to help spot problems before they interfere with your calling.

Choice of two domestic rate structures: single tiered rates or 3-tier mileage rate structure.

AT&T MEGACOM

- Offers single-location companies essential features: AT&T quality and reliability at competitive prices.
- Opportunity to add on powerful options, such as MegaWatch, the 24-hour proactive maintenance service.

AT&T MEGACOM 800

- Guaranteed emergency backup service in 30 minutes or less if service is ever interrupted.
- Advanced routing features help you complete more calls.

INTERNATIONAL FEATURES

- Available with any Megacom service—gives you the clearest connections to over 200 countries and areas around the world.
- Includes the exclusive AT&T Language Line® Services, which give you an on-line interpreter in 140 languages.

Call 800 858-MEGA, ext 25.



AT&T

The right choice.

Readers Report

fensive strategy potentially undermining what seems to be a quality product ("Chrysler yells 'look at me' to an up-scale audience," Top of the News, May 25).

Yes, quality is imperative for American business to regain its competitive edge, but when it's fourth-and-long, as is the case with Chrysler's business, why let the other team(s) into the huddle to hear the play? For GM, Ford, Toyota, and Nissan, it is time to call a blitz.

Peter N. Schmidt
Group Brand Manager
Philip Morris International Inc.
Tokyo

CINCINNATI BELL IS THE MARKETER, NOT THE DEVELOPER

While I was gratified to see our electronic waste-trading system mentioned ("This system is literally garbage in, garbage out," Developments to Watch, May 25), I must point out that the system was developed by Environomics and WasteNet in 1991; Cincinnati Bell is responsible for marketing the system.

Warren Church
President
Environomics Inc.
Cincinnati

THE 'SCREW' CLAUSE: WHO'S THE LOSER?

You referred to the "screw" clause on convertible bonds—whereby bondholders, on conversion, lose six months' interest ("Beware the turn of the screw," Finance, June 1).

I am sorry to tell you that this has been normal practice on domestic bonds issued in London since they were first introduced nearly 30 years ago. Not only do holders lose six months' interest on the bonds, but they also lose a half-year's dividend on the common shares received on conversion.

Two years ago, one of the largest companies in Britain issued a conversion notice that deliberately obscured both the loss of interest and loss of dividend, stating that the holder would in fact receive a higher rate of return. The statement was totally untrue in year one. The statement was justified because the circular to bondholders had been cleared by the London Stock Exchange as appropriate regulatory authority!

Fortunately, fund managers in London do know that they are being "screwed."

R. T. Cooper
MacIntyre Hudson
Portfolio Management Ltd.
London

CORRECTIONS & CLARIFICATIONS

In the chart "Expanding your culinary palate" (Personal Business, June 8), we published an incorrect phone number for Cuisines of the Sun. The correct number is 808 885-6622, ext. 7801.

Iwould like to expand on one point. A company's stock-price performance following issuance of a convertible security is usually a lot more important to an investor than getting the last interest or dividend payment.

For example: Pep Boys convertibles. When the issue was first brought to market in 1986, Pep Boys' stock price was 14. It rose to 22 by the time the bonds were redeemed. That's nice for the bondholders. The total return to an original investor who paid par and converted on Apr. 30 was about 8.5%, compounded annually—in other words, 250 basis points higher than Pep Boys' 6% coupon.

How did this happen? Stock-price appreciation. Not extraordinary [compared with the overall market's gains] but better than a poke in the eye. In addition, it can hardly be called "getting screwed." Thank you Manny, Moe, and Jack. Good job!

David B. Parshall
New York

MORE INFORMATION, PLEASE, ON SAVING FOR RETIREMENT

As correctly noted in "It's time to start coddling your nest egg" (Personal Business, June 8), employee participants are rarely provided with either an adequate range of investment choices or, most important, sufficient information about proper asset allocation, the specific investment choices available to them, or the risks and rewards involved in long-term investing in general.

Many 401(k) participants, most of whom are ill-equipped to make such decisions, must decide in a vacuum among options that can mean the difference between a comfortable retirement and a not-so-comfortable one.

One reason for this distressing trend that your article did not discuss is the desire of many short-sighted employers to cut the administrative cost of their 401(k) plans to the bone. Employers often choose the low-cost provider—one who rarely provides either an adequate range of unbiased investment choices or sufficient guidance to participants on how to invest their funds.

Frequently, the low-cost provider is a

single mutual-fund family or insurance company that provides administrative and record-keeping services at a loss in order to capture an annual fee on the assets under management. Unfortunately, being captive to one investment company provides, by definition, biased investment choices. Thankfully, because of articles such as yours, more employees are demanding—and getting—a ter shake.

Carl G. Erickson
President

Whitegate Investment Counselors
Concord, N.H.

CONGRESS ON CEO PAY: LOOK WHO'S TALKING

In "Executive pay" (Cover Story, May 30), I found the quote from Senator Carl Levin (D-Mich.) totally laughable. He found it appalling that "companies were laying off workers, asking for sacrifices, while at the same time their CEOs were significantly increasing their salaries. When there is no relationship between pay and profitability of a company, you are in an anticompetitive position."

Presumably, he is unaware of what both houses of Congress have been doing in recent years: cutting the federal work force and calling for higher taxes—all the while treating us to the spectacle of the late-night pay raise they gave themselves. Is this another case of "Do as I say, not as I do"?

Just wondering.

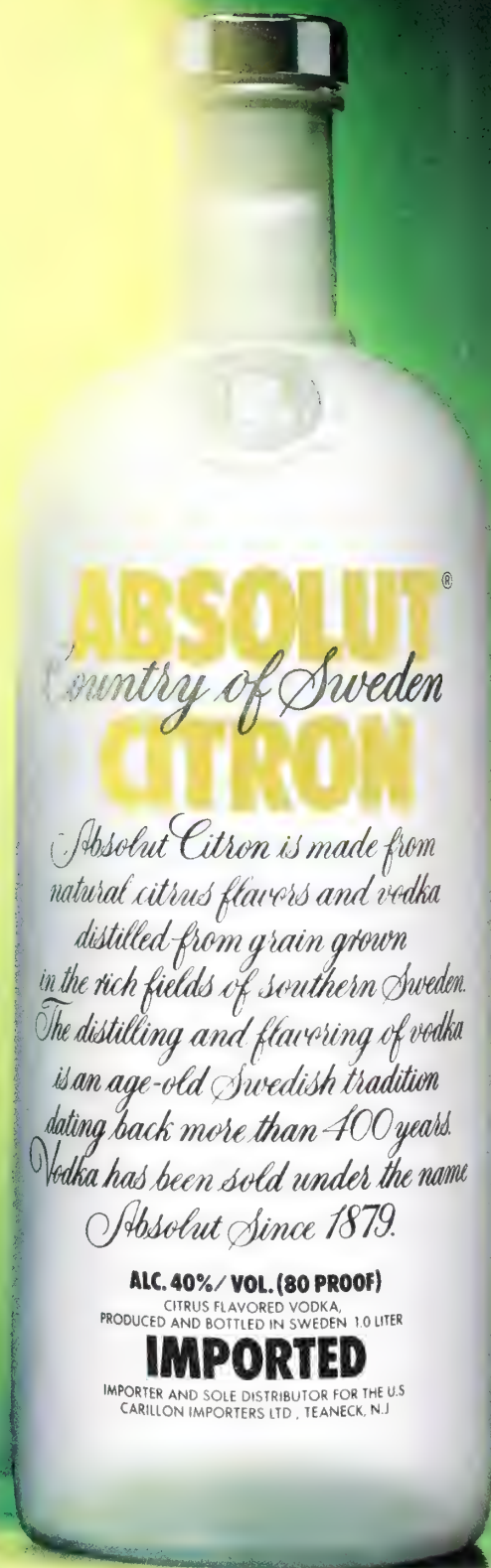
Kevin P. Bush
London

TAX THE LAND, NOT THE BUILDINGS

In your report on "The economic crisis of urban America" (Cover Story, May 18), you neglected the single most powerful tool for restoring economic vitality to our cities: the property tax. The property tax is two completely different taxes: (1) a tax on the values of land, and (2) a tax on the values of buildings. At present, the first is too small, while the second is too high. The government should greatly increase the tax rate on land values and eliminate the tax on buildings. This would make it very unprofitable to speculate in land, but much more profitable to use land.

Matthew M. Hall
Austin, Tex.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4400. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space.



ABSOLUT
Country of Sweden
CITRON

*Absolut Citron is made from
natural citrus flavors and vodka
distilled from grain grown
in the rich fields of southern Sweden.
The distilling and flavoring of vodka
is an age-old Swedish tradition
dating back more than 400 years.
Vodka has been sold under the name
Absolut Since 1879.*

ALC. 40% / VOL. (80 PROOF)

CITRUS FLAVORED VODKA,
PRODUCED AND BOTTLED IN SWEDEN 1.0 LITER

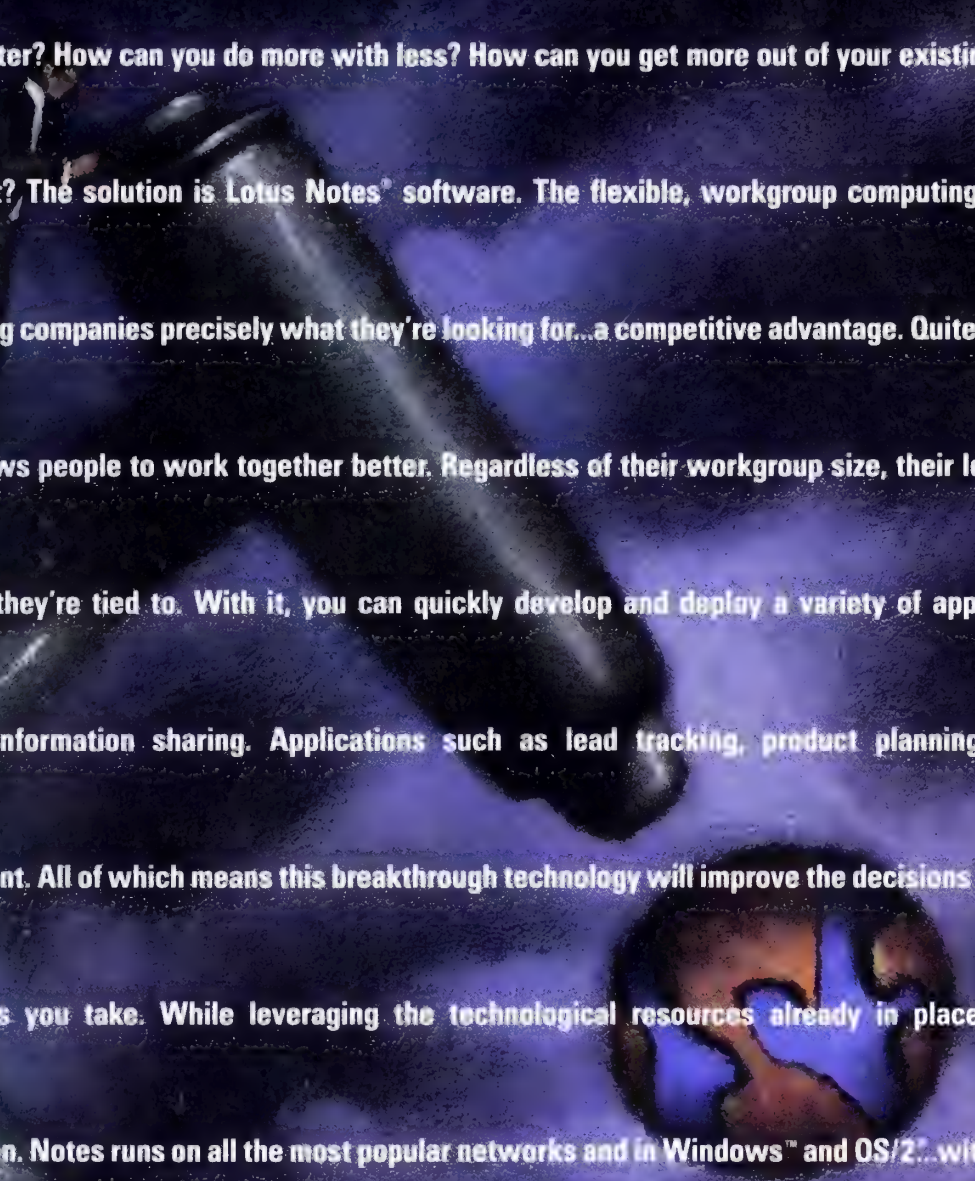
IMPORTED

IMPORTER AND SOLE DISTRIBUTOR FOR THE U.S.
CARILLON IMPORTERS LTD., TEANECK, N.J.

ABSOLUT LIMELIGHT.

FOR GIFT DELIVERY OF ABSOLUT® CITRON™ CITRUS-FLAVORED VODKA (EXCEPT WHERE PROHIBITED BY LAW) CALL 1-800-243-3787.
PRODUCT OF SWEDEN. 40% ALC/VOL (80 PROOF). 100% GRAIN NEUTRAL SPIRITS. ©1989 CARILLON IMPORTERS, LTD., TEANECK, N.J.

IT'S A
COMPETITIVE
WORLD.
POSITION
YOURSELF
ACCORDINGLY.

A hand holding a pen, pointing towards a small globe of the Earth. The background is dark and textured, suggesting a night sky or a deep space environment. The pen is dark and the hand is partially visible. The globe is small and positioned in the lower right quadrant of the image.

Staying competitive. It's the greatest challenge your company faces. How can you bring your products to market faster? How can you do more with less? How can you get more out of your existing technology investment? The solution is Lotus Notes® software. The flexible, workgroup computing environment that's giving companies precisely what they're looking for...a competitive advantage. Quite simply, Lotus Notes allows people to work together better. Regardless of their workgroup size, their location or the networks they're tied to. With it, you can quickly develop and deploy a variety of applications that facilitate information sharing. Applications such as lead tracking, product planning and quality management. All of which means this breakthrough technology will improve the decisions you make and the actions you take. While leveraging the technological resources already in place within your organization. Notes runs on all the most popular networks and in Windows™ and OS/2™...with Macintosh®

and UNIX® on their way. And it costs less than \$500 per user. So call Lotus at 1-800-872-3387, ext. 6818. And give your organization a better way to work. Not to mention a better way to win.

Lotus Notes

A GUIDE FOR YOUR SUMMER READING

Summertime, and the reading is easy—or it should be, according to the conventional wisdom. Pondering and perspiring supposedly don't mix. But we don't buy it. As you catch up on your reading, what better place to think and learn than under a shady tree with a tall iced tea and a comfortable chair? This is not to say the books on our summer reading list aren't readable and entertaining. A couple are truly light. And all are lightweight in one sense of the word: They're now out in paperback and ready to slip into your suitcase.

The Man Who Discovered Quality by Andrea Gabor (Penguin, \$11). W. Edwards Deming, an American statistician, became an icon of quality management in Japan during its postwar rebuilding. Something of a curmudgeon, he holds American managers in contempt for focusing on merely limiting product defects. Deming looks for quality in all aspects of business: what goes on in the factory, how products are sold, how managers deal with workers. Gabor, a former *BUSINESS WEEK* editor, presents him as the sort of man given to dating the eggs in his refrigerator with a pen to make sure the older ones get eaten first. Obsessive? Maybe. But in Japan, Deming is still revered. In the main lobby of Toyota Motor Corp.'s headquarters in Tokyo, three portraits hang: the founder's, the chairman's, and, largest of all, Deming's.

Under the Influence: The Unauthorized Story of the Anheuser-Busch Dynasty by Peter Hernon and Terry Ganey (Avon, \$12.50). Don't read this book to find out how Anheuser-Busch has remained America's beer king. It's not so much company history as real-life soap opera detailing how the same affinities and peccadilloes have plagued five generations of Busch men. A lively beach read. You might want to bring along a cold six-pack.

Lonely Hearts of the Cosmos: The Story of the Scientific Quest for the Secret of the Universe by Dennis Overbye (Harper Perennial, \$13). Half of the book's appeal lies in finally getting clear

explanations of exotic theories, such as "inflationary universe" and "superstrings," that try to describe how the universe came to be as it is today. The other half lies in the sometimes suspenseful, often poignant human dramas that run through the tales of researchers groping ever closer toward basic secrets of the cosmos.

The Greatest-Ever Bank Robbery: The Collapse of the Savings and Loan Industry by Martin Mayer (Collier, \$12.95). This work by a veteran popularizer of economic subjects gives us the first full picture of what happened. Mayer strips



away the phony home-finance do-gooder image that shielded shady savings and loan association owners for years and reveals a bunch of brigands who lived well off your money long before Ronald Reagan released their most corrosive juices. Indeed, Washington gets to share the blame. But Wall Street investment houses, Mayer calculates, made the most off the scam by selling mortgage-backed securities and stuffing S&Ls with junk bonds. He figures the scandal cost taxpayers around \$500 billion, and in the updated paperback edition, he pins at least \$150 billion of the bill on post-scandal bungling by the Resolution Trust Corp.

Stolen Season: A Journey Through America and Baseball's Minor Leagues by David Lamb (Warner, \$9.99). Lamb bought a used RV and a copy of *Baseball America's 1989 Directory*, promised his wife he wouldn't come home spitting to-

bacco, and hit the road. It's a fine ride through the part of baseball that remains closest to its low-key origins.

The Japan That Can Say No: Why Japan Will Be First Among Equals by Shintaro Ishihara (Touchstone, \$10). Michael Crichton's novel *Rising* made you paranoid, keep in mind. Ishihara's work is categorized on its paperback cover as "current affairs." It can, and should, ignore some of his more provocative America-bashing assertions. It is harder, though, to dismiss the insight that this politician and novelist provides into the current thinking of Japanese. Ishihara dwells on two trends: increased national pride coupled with the perception that America has an overblown idea of its importance to the rest of the world. Clearly, Ishihara can't resist being outrageous, and his views are ultranationalist. But the book did sell a million copies in Japan alone.

Parliament of Whores: A Lone Hunter Attempts to Explain the Entire U. S. Government by P. J. O'Rourke (Vintage, \$12). The not-so-funny theme of this very funny book is that government and politicians are so boring that citizens don't pay them much heed and never quite get around to throwing the bums out. O'Rourke's flippancy sometimes evokes Hunter S. Thompson, but his venom is more distilled.

Rivethead: Tales from an Assembly Line by Ben Hamper (Warner, \$9.99). The fourth-generation auto worker, Hamper spent 11 years as a riveter at General Motors Corp.'s Truck & Bus plant in Flint, Mich. A nervous breakdown in 1988 compelled him to give up his cherished nightmare of someday winning a 30-year pin at GM. Angry yet cynical, *Rivethead* is about people who sweat for their pay. These folks, Hamper says, still toil in unsafe factories, companies that often treat them like children. There's the message board that flashes "Squeezing Rivets Is Fun!" and there's Howie Makem, the plant mascot—a guy dressed as a cat and wearing a long, red cape emblazoned with a star for quality. The workers eventually get to pelting Howie with rivets, which is just what this book does to America: comforting concepts about opportunity and bootstrap success.

The Day the Phones Stopped: How People Get Hurt When Computers Go Wrong by Leonard Lee (Primus, \$12). Computer failure can be bothersome, but it was just now when the system

these reviews were being written down for a few minutes. It can be eating and costly, as when all three York airports had to shut down one last September because phone lines lagging air-traffic-control computers severed. And it can be fatal, allowing an Iraqi Scud missile to escape interception and blow apart a makeshift U.S. barracks, killing 28 people. Lee's case studies are engrossing, but they need chapter headings and/or an index. Computer chaos stemming from mismanagement or larceny rather than error is the subject of **Cyberpunk: Outlaws and Rebels on the Computer Frontier** by Markoff and his wife, former BUSINESSWEEK editor Katie Hafner (Touchstone, \$12). They examine a rogue's gallery of hackers, but dwell on California computer whiz Kevin Mitnick and his demagogic hacking rampage. A wealth of technical details about the personal lives of Mitnick and other misadventurers what might otherwise be technical material.

Why Gorbachev Happened: His Triumph, His Failure, and His Fall by Robert Kaiser (Touchstone, \$14). Updated material on last summer's attempted coup, the book outdoes rivals in making sense of the Kremlin's breathless events since 1984.

Which Side Are You On: Trying To Be a Labor Hero When It's Flat On Its Back by David Geoghegan (Penguin, in bookstores mid-July, \$11). Geoghegan's account of his years as a union activist is written, witty, and, on the subject of union labor leaders, scathing. The book is part memoir, part history, and a puzzled soul-searching about why the privileged product of the Ivy League should spend his life with such a market crowd.

There Are No Children Here: The Story of Two Boys Growing Up in the Other Side by Alex Kotlowitz (Anchor, \$12). Through deeply affecting portraits of two young brothers in the Governor Horner Homes on Chicago's West Side, Kotlowitz, a reporter for *The Wall Street Journal*, makes vivid the terrors of childhood in the projects. While most wonder what they'll be when they grow up, Lafayette and Pharoah Rivers, 10 and 11 at the outset of the book, wonder if they'll grow up at all. Some wonder if Pharoah won't talk about the violent death all around. Other times, "It's not because of a worsening stutter. I'm real tired," says brother Lafayette, plagued by nightmares and diarrhea. "Anytime I go outside, I ain't allowed to come back." But the boys are brave and resilient. This insightful book examines two years of their lives.

BY TIMOTHY BELKNAP

Belnap is the acting Books editor.

Prescription For Incurable Romantics.



THE DIAMOND ANNIVERSARY BAND.

Whether it's your 1st, 5th or 10th anniversary, this year, tell her you'd marry her all over again.

A diamond is forever.

G.M. Pollack & Sons · Daniel's · The Diamond Trading Co.

De Beers

Suggested retail price for ring \$1,499. For more information, call Feature at 800 227-1827.

Get Relief From Back & Neck Pain

A Conservative Therapy, Comprehensively Applied

The Back Machine™ combines the most effective ways to attain relief from back and neck pain into one easy to use, safe unit designed to help you return to a more normal, pain free life. And it feels good, even if you hurt.

How The Back Machine Works:

- **Massage** - Soft rollers massage muscles, increasing circulation, reducing muscle spasm, tension and stress.
- **Stretching** - Muscles are passively stretched, increasing flexibility and reducing pain.
- **Traction** - Mild traction restores spine length and pliability, relieving disc pressure.
- **Mobilization** - Restoration of movement occurs and promotes alignment of the spine.

Five Years of Clinical Use

Tested for over 5 years by doctors, physical therapists, and chiropractors, *The Back Machine* has proven safe, effective, and comfortable.

60-Day Home Trial

We're so confident you'll experience back pain relief that we offer *The Back Machine* with an unconditional 60-day money back guarantee.

Call or Write Today For FREE BROCHURE AND VIDEO
1-800-433-5599



☐ **YES!** I want to relieve my back pain.

Please send me a FREE brochure and Video.

☐ VHS ☐ BETA

Name

Address

City

State Zip

Evening Phone ()

Back Technologies

2525 West Casino Road • Everett, WA. 98204

1-800-433-5599

© 1992 Back Technologies, Inc. Dept. 387

WHAT WASN'T ON THE RIO AGENDA? A LITTLE COMMON SENSE

BY ALAN S. BLINDER



The notion that we must eliminate environmental hazards 'regardless of the cost' doesn't make economic sense. The only logical approach: Compare costs and benefits and seek out the good deals

ALAN S. BLINDER IS THE GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON AND THE AUTHOR OF GROWING TOGETHER

As the Earth Summit in Rio de Janeiro moved through its contentious agenda, economists around the world held their collective breath. Their hope: that economic progress would not be hoisted on an environmental petard.

The reason is not that economists are callous about the environment. It is just that our occupational lenses make us see things such as cleaner air and water as "commodities" that societies "buy" in greater or lesser amounts by giving up other things of value—not as inviolable rights that must be guaranteed at any cost. It's a view that few outside the profession share, and it leads to precepts that fall somewhat short of moral clarion calls. For example:

- Before making a decision, nations should tote up the costs and benefits of any proposed measure to improve the environment.

- We should hesitate before spending huge sums to protect ourselves from hazards that may be as much imagined as real.

- Once we set goals, nations should pursue them as cheaply as possible.

Let me defend each of these in turn. First, what about cost-benefit analysis, which has come under attack of late? Is it really a smoke screen behind which polluters can do their dirty deeds? Hardly. While specific elements of any cost-benefit calculation can always be called into question, the validity of the principle should not be.

The plain fact remains that the world cannot afford everything: Priorities must be set. It may well be nobler for a citizen of a rich country to spend \$200 to reduce greenhouse gases than to buy another VCR. But in the poorest countries, where \$200 is a year's income, something more precious than electronic gadgetry is given up whenever growth is slowed. The notion that we must eliminate some environmental hazard "regardless of the cost" cannot make sense. The only logical approach is to compare costs and benefits and seek out the good deals.

POLLUTION FUTURES. Which brings me to my second precept: Sacrificing economic growth to protect ourselves from dubious environmental hazards is, well, dubious. The very existence of global warming, not to mention its magnitude, is in some scientific dispute. Moving from climatology to economics, it is clear that a small increase in average global temperature (no one would welcome a large one) would have both beneficial and harmful effects in various locales. Even if we decide that global warming is a bad thing, we must still reckon in the costs of stopping it.

"Sustainable growth" is one of those nice-

sounding phrases. Who, after all, favors unsustainable growth? But those who march under this banner need to be reminded that humankind's biggest problem remains a poverty, not rising temperatures. With billions of people living on the edge of starvation, any slowdown in economic growth may be a death sentence for thousands. We may not know whether the earth is warming, whether that is harmful on net, nor how to prevent it. But we can see millions of people dying in poor countries from hunger and lack of elementary sanitation—things we know how to fix. Ask yourself which is the better bargain.

I come now to the third precept: When we spend the world's (or the nation's) antipollution budget, we should be penny-pinchers, not spendthrifts. Studies of the U.S. have estimated potential cost savings in the 10-90% range if air and water pollution are reduced by using market incentives rather than command-and-control. For years, economists asked: Why buy for a dollar what you can buy for a dime? Now, at last, the U.S. is beginning to achieve some of these savings by allowing companies to buy and sell emission permits on a small scale. Similar savings are presumably available to the world. Yet at Rio summiteers want to freeze each country's carbon dioxide emissions at 1990 levels—a solution reminiscent of old-style Soviet planning.

CARBON TAX? But wait a minute. Why are price incentives sometimes save 90% of the costs of pollution abatement but sometimes only 10%? The answer becomes clear once we understand how the market works its magic: by assigning the task to the companies that can do it most cheaply. This ability is of little value if abatement costs are more or less uniform across the economy, or if society insists on virtually 100% cleanup. But if the goal is, say, to reduce emissions by 20% to 30%, and abatement costs vary substantially from source to source, then the potential savings from using the market mechanism are enormous.

This reasoning points strongly to a carbon tax rather than to fixed national quotas on emissions. The goal is clearly not to zero out carbon dioxide in the atmosphere, but only to reduce it somewhat. And while I claim no expertise on the subject, I presume that emissions control costs are quite different in Bangladesh and Boston.

So what do we conclude? Not that we should ignore environmental degradation, nor that a worldwide approach is inappropriate. And certainly not that the rich nations should not pay some of the freight for the poor. The conclusion is simply that a little economic rationality after Rio would go a long way.

**INTRODUCING
AFFORDABLE COMPUTERS
FROM THE COMPANY
THAT'S ALWAYS STOOD
FOR MORE
THAN AFFORDABILITY.**

THE COMPAQ DESKPRO/i. S A LIMITED PRICE LEAD

The company most qualified to advance the state of the desktop computer announces four systems that represent a breakthrough in R&D. At prices that won't ruin your P&L. Reflecting the level of thinking and quality that you've come to expect from Compaq.

At Compaq, there's a fundamental belief held by all of us that when you set extraordinary goals, extraordinary people will meet them.

Recently, for example, you made it clear to us that you wanted new PCs, with everything from advanced graphics to audio capability to affordable prices. Our response: the COMPAQ DESKPRO/i Family of PCs. Four new systems loaded with features to

enhance productivity.

The built-in COMPAQ QVision 1024 Graphics

times faster than most popular video graphics subsystems. So quickly, a matter of fact, you may find your computer working for you. Instead of the other way around.

Its unique processing upgrade path ensures



Controller, for example, allows you to scroll, re-size windows and pull down menus up to ten

that your PC won't be swept into obsolescence. Simple chip upgradeability and a 64-KB cache

*Transaction provided by contracted Service Providers and may not be available in certain geographic locations. Contact the Compaq Customer Support Center for further details. © 1993 Compaq Computer Corporation. All Rights Reserved. Printed in the U.S.A. COMPAQ DESKPRO Registered U.S. Patent and Trademark Office. QVision

MUCH FOR THE IDEA THAT LIMITED THINKING.

memory module option
wide quantum leaps
performance. Without

1386/25, 386/33, 486SX/25,
5/33 & QVision accelerated
graphics & Chip upgradability
integrated business audio & 4
RAM (expandable to 32 MB)
cache memory standard & 3
expansion slots & 3 drive bays
4-MB to 510-MB hard drive
options & Multi-level security
features & Microsoft MS-DOS
as published by Compaq



lar outlays of cash.
he fully integrated
o system brings an
precedented, yet not

unfamiliar dimension to
mainstream business com-
puting: your voice. The
result of a collaboration
between Compaq and
Microsoft, it allows you,
among other things, to
actually paste voice mes-
sages into spreadsheets
and documents. Either as
notes to yourself or as
voice-mail across your
entire network.

And we've engineered
this breadth of technol-
ogy right onto the PC's
system board, preserv-
ing the small footprint,
large storage capacity
and expansion of the
COMPAQ DESKPRO/i.

Not to mention your
financial integrity.

Add CompaqCare, a
new service and support
program with our free,
one-year, on-site* lim-
ited warranty. An Asset
Management Provision
that gives you and your
network administrator a
snapshot of your PC's
configuration. And you
have nothing short of a
system that breaks a lot
of new ground. Without
breaking the bank.

For more detailed in-
formation, just call us
at 1-800-345-1518, ext.
210 in the U.S., or call
us at 1-800-263-5868,
ext. 210 in Canada.

We bet you'll be as ex-
cited about the COMPAQ
DESKPRO/i as we are.



*In scrolling, window resizing and
accessing menus, our new QVision
accelerated graphics beat the com-
petition by as much as 10 to 1.*



*You can paste voice messages into
Microsoft Windows 3.1 business
documents and spreadsheets with our
integrated business audio system.*



OUR NEW NOTEBOOK MILLION BUCKS. WHICH MISLEADING

Recently, our engineers set out to create a remarkably different notebook computer. With all of the quality, durability and features that you need. All at a sensible price. The result, as you can plainly see, is a remarkably different notebook. The new COMPAQ Contura 100.



One of the best things
to happen to notebook
computing since the fold-
down airline tray table,
the COMPAQ Contura
Family of notebook PCs
sets the standard for what
an affordable notebook
ought to be.
Just beneath its sleek,
ergonomic styling lies
rugged, well-tested, well-
thought-out PC you
expect from Compaq.
No substandard part

*This service is provided by a contracted service provider and may not be available in certain geographic locations. Contact the Compaq Customer Support Center for details. © 1997 Compaq Computer Corporation. All Rights Reserved. Printed in the U.S.A. COMPAQ, Registered U.S. Patent and Trademark Office. Contura and Compaq are trademarks of Compaq Computer Corporation.

PC LOOKS LIKE A OULD MAKE THIS THE MOST D IN HISTORY.

components. No sec-
rate manufacturing.
gos stuck on the out-
fter somebody else's
went inside.

anks to high levels
ip integration and
of the smartest me-
cal design this side
SA, we've managed
gineer costs out and

386SL/25 with 64-KB cache
MB RAM (up to 12 MB) & 60-
0-MB hard drive
386SL/20 & 2 MB RAM (up
MB) & 40- or 84-MB
drive & Both models: 6.2 lbs.
" VGA display & Isolated
ed "T" cursor controls & 3.5-
Cd battery (optional NiMH
ry) & Microsoft MS-DOS
published by Compaq

ght stuff in.
en either COMPAQ
ura PC and you'll
a large, 9.5-inch
n beaming brightly.

Lay your fingers on
the keyboard and they im-
mediately feel at home.

This notebook also has
a unique ability to hiber-
nate when left idle, sav-
ing all open files to
the hard drive and auto-
matically shutting your
notebook down. Preserv-
ing your remaining bat-
tery life. Start up hours,
days, or even years later,
and you're right where
you left off.

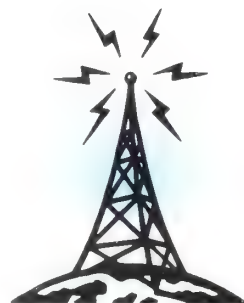
In addition to all of
the above, the COMPAQ
Contura notebook PCs
support three internal
power-conserving mo-
dems from Compaq.

All of which is backed

by CompaqCare, our new
service and support pro-
gram, which includes a
free one-year limited war-
ranty good anywhere in
the world. And free on-
site* service anywhere in
the U.S. and Canada.

For information, call
1-800-345-1518, ext. 220
in the U.S., or call
1-800-263-5868, ext. 220
in Canada.

We'll tell you more
about it. We'll tell you
all the places you can get
it. And we'll tell you
that you won't find an
affordable notebook PC
that looks this good and
works this well no mat-
ter who you call.



*Just because you're out of the office
doesn't mean you're out of touch.
The COMPAQ Contura PC features
an optional power-conserving 2400-
bps data / 9600-bps fax modem.*



*As well as a uniquely sophisticated
power conservation tool, Hibernation
also serves as an easy-to-use placemark.*



AN INEXPENSIVE PC THAT FROM THE COMPANY

What happens when the best computer engineers in the world design a low-priced desktop PC? You get the new COMPAQ ProLinea Line of PCs, perhaps the best value PCs in the world. What happens when a clone maker designs a low-priced PC? You get what you pay for.

When Compaq engineers set out to build an affordable, full-performance desktop PC with all the essential features, there were a lot of options to choose from. We could have bought

an existing low-end computer company.

We could have fallen out all manufacturing

We could have bought parts from the cheapest vendor in town.

But then all we would have ended up with simply another inferior



* Performance based on SPECintbase92. For more information on the SPECintbase92 benchmark, contact the Compaq Customer Support Center. For more information on the SPECintbase92 benchmark, contact the Compaq Customer Support Center. For more information on the SPECintbase92 benchmark, contact the Compaq Customer Support Center.

AS GOOD AS A COMPAQ. IT OUGHT TO KNOW.

priced clone. And
we wanted was a
priced COMPAQ
puter.

Which is what you
us you wanted.

through some high
of chip integration
come equally high
of engineering,

386SX/25 ◀ small
int ◀ 2 MB RAM ◀ 2 ISA
◀ 2 drive bays ◀ 40- or
B hard drive
386SX/25 ◀ 2 MB RAM
SA slots ◀ 3 drive bays
or 120-MB hard drive
486/33 ◀ 4 MB RAM
SA slots ◀ 3 drive bays
or 120-MB hard drive
models include high-resolution
x 768 video and pre-
installed Microsoft MS-DOS 5.0
published by Compaq

and just plain com-
sense, we've cut
in system design
manufacturing.
while still managing
over 100 percent of

the virtues you've come
to expect from Compaq.

You can choose from
three different models,
opting for either Intel
386SX/25 or 486/33 pro-
cessing power.

So whether it's expan-
sion, storage, processing
speed or a small foot-
print that you're most
concerned with, there's
a model perfectly suited
to your needs.

And each comes with
a high-resolution 1024 x
768 video system.

Most importantly, the
new COMPAQ ProLinea
PCs are backed not only
by the assurance of the
COMPAQ name, but also
by CompaqCare, our new

service and support pro-
gram. Which includes
a free one-year, on-site*
limited warranty, and a
host of other services.

And to go along with
our new line of PCs,
there's a whole new line
of places you can find
them. Give us a call for
more details.

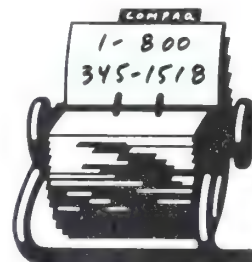
In the U.S., call us at
1-800-345-1518, ext. 215,
and in Canada, just call
1-800-263-5868, ext. 215.

We think you'll be
pleasantly surprised at
exactly how much the
COMPAQ ProLinea PCs
have to offer.

And equally surprised
by how little we're able
to offer them for.



All in all, the COMPAQ ProLinea 3/25's PC sizes up quite nicely. At a mere 12.6" x 14.9" x 3.5", it's one of the smallest footprints in the industry.



All of our models are backed by CompaqCare, our comprehensive new service and support program. For details, just call 1-800-345-1518.



AFFORDABILITY RUNS DEEP.

Affordable prices aren't limited to our new products. In fact, we've lowered suggested list prices by up to 40% on COMPAQ hardware. And even more on our list of options.

In the past twelve months at Compaq, we've incorporated major efficiencies in design, engineering and manufacturing across our product line.

As a result, you'll notice savings on everything from our notebook PCs to our desktop computers to our servers to our extensive list of optional equipment. The right computer at the right price.

The following list includes just some of the COMPAQ products that are now more affordable. Obviously, when it comes to the subject of affordability, we could go on and on. But we'd rather talk to you directly.

Give us a call and we'll tell you where you can find new COMPAQ products, not-so-new COMPAQ products and the new prices for both.

Call 1-800-345-1518, ext. 225 in the U.S., or in Canada, call 1-800-263-5868, ext. 225.

DESKPRO 386s/20N Model 0
◀ DESKPRO 386s/20N Model 1

◀ DESKPRO 386s/20N Model 60
◀ DESKPRO 386s/20 Model 1
◀ DESKPRO 386s/20 Model 60
◀ DESKPRO 386s/20 Model 120
◀ DESKPRO 386/25M Model 1
◀ DESKPRO 386/25M Model 60
◀ DESKPRO 386/25M Model 120
◀ DESKPRO 486s/16M Model 1
◀ DESKPRO 486s/16M Model 60
◀ DESKPRO 486s/16M Model 120
◀ DESKPRO 486s/25M Model 1
◀ DESKPRO 486s/25M Model 60
◀ DESKPRO 486s/25M Model 120
◀ DESKPRO 486/33M Model 1
◀ DESKPRO 486/33M Model 120
◀ DESKPRO 486/33M Model 340
◀ DESKPRO 50M Model 1
◀ DESKPRO 50M Model 120
◀ DESKPRO 50M Model 340

PORTABLE 486c Model 120
◀ PORTABLE 486c Model 210
SLT 386s/20 Model 60
◀ SLT 386s/20 Model 120
◀ LTE Lite/20 Model 40
◀ LTE Lite/20 Model 60
◀ LTE Lite/20 Model 84
◀ LTE Lite/25 Model 60
◀

LTE Lite/25 Model 84
◀ LTE Lite/25 Model 120
◀ LTE 386s/20 Model 30
◀ LTE 386s/20 Model 60
◀ LTE 386s/20 Model 84
SYSTEMPRO/LT Model 486-SX/25-210
◀ SYSTEMPRO/LT Model 486SX/25 510
◀ SYSTEMPRO/LT Model 486SX/25-680
◀ SYSTEMPRO/LT Model 486/33-210
◀ SYSTEMPRO/LT Model 486/33-510
◀ SYSTEMPRO/LT Model 486/33-1020
◀ SYSTEMPRO 486/33-420
◀ SYSTEMPRO 486/33-840
◀ SYSTEMPRO 486/33-2040

40-Megabyte Hard Drive
◀ 60-Megabyte Hard Drive
◀ 84-Megabyte Hard Drive
◀ 120-Megabyte Hard Drive
◀ 210-Megabyte Hard Drive
◀ 340-Megabyte Hard Drive
◀ 510-Megabyte Hard Drive
◀ 240-Megabyte Drive Array
◀ 420-Megabyte Drive Array
◀ 680-Megabyte Drive Array
◀ 1.02-GB Drive Array
◀ 1-Megabyte Memory Module
◀ 2-Megabyte Memory Module
◀ 4-Megabyte Memory Module
◀ 8-Megabyte Memory Module
◀ 2-Megabyte Single-Socket Memory Module
◀ 8-Megabyte Single-Socket Memory Module
◀ 32-Megabyte Dual-Socket Memory Module
◀ 1.3-GB Differential Interface Hard Drive....



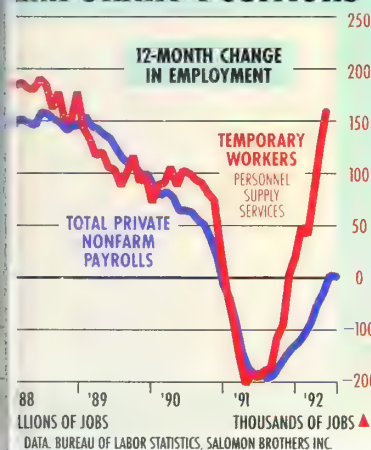
ENE KORETZ

TEMPERATURE ARE LLED—BUT WILL A B REBOUND FOLLOW?

Although private, nonfarm payroll employment has been edging up in months, its May reading shows ally no growth from its year-earlier. But, as economist Brian M. Jones of Monon Brothers Inc. points out, the wage payroll numbers mask an im- ment development on the hiring front: onnel firms, which are mainly pro- s of temporary help, registered a onth job gain of 159,000 in April, latest month for which data are able (chart).

hile that number seems like small toes in a work force of over 125 on, it's a huge gain for the tempo- help industry. More important, per- el-agency employment has been a ble leading indicator of changes in payroll jobs since the Labor Dept. n keeping tabs in the early 1970s.

THE JOB GAINS ARE IN TEMPORARY POSITIONS



or over a decade," says Jones, "to-year changes in temporary jobs been highly correlated with 12- h changes in payroll jobs a month vo later—with each gain or decline ,000 temporary positions foreshad- g equivalent shifts of about a million ll jobs." By that measure, payroll yment growth should soon be rack- p year-to-year gains approaching 3 n jobs.

such a pickup in hiring feasible? nt surveys by Manpower Inc. and & Bradstreet Corp. both point to a rise in companies' plans to hire enant workers in the third quar- indeed, with the factory workweek

in May stretched to a 26-year peak, manufacturers may now have no alterna- tive to adding bodies if they want to boost output. D&B economist Joseph W. Duncan says his company's survey sug- gests that business will have increased payrolls by nearly 2 million workers by the time 1992 draws to an end.

Jones isn't so sure, however. Restruc- turing has boosted companies' perma- nent reliance on contingent and tempo- rary workers, he notes. And because of continued uncertainty about the current economic outlook, businesses seem afraid to incur the high fixed costs associated with permanent hires. "A meaningful rise in permanent payroll employment," cautions Jones, "may not occur until the economy picks up enough steam to allay employers' fears."

COMMERCIAL REAL ESTATE: THE WORST SEEMS TO BE OVER

It's far from the end of the slump in commercial real estate. It may not even be the beginning of the end. But it does at least appear to be the end of the sharp market collapse that ravaged com- mercial property and pushed so many thrift institutions into insolvency.

The Federal Deposit Insurance Corp.'s May survey of real estate experts around the country reveals that for the first time since the FDIC began such sur- veys a year ago, positive assessments of the commercial real estate market slight- ly outweighed negative evaluations in all four major regions of the country. The sharpest improvement was in the Northeast, where only 14% of respon- dents reported deteriorating market con- ditions compared with 48% a year ago.

None of this, of course, implies that commercial real estate will mount a sig- nificant recovery anytime soon. Vacancy rates are still extremely high, and some 85% of respondents to the May survey reported an excess supply of commercial real estate in their areas.

DEVELOPING NATIONS ARE SET TO GROW AT A NIFTY PACE

Developing countries are hardly strong enough to act as the loco- motive for the sluggish world economy, but according to the latest *World Eco- nomic Outlook* released by the Internat- ional Monetary Fund, they will at least provide a little fuel for the engine. The IMF notes that global economic activity

actually declined by 0.3% last year, as growth in industrial nations fell to 0.8% and output in former Soviet bloc coun- tries plummeted by 17%.

But the report's real focus is on 1992 and 1993. The IMF expects the devel- oped nations to post only 1.8% growth this year, not much to cheer about. The good news is that consumer inflation in industrial nations is expected to continue its decline—from 4.9% and 4.4% in 1990 and 1991 to 3.3% this year and 3.2% in 1993, when their growth is expected to pick up to a 3.6% pace.

By contrast, developing countries are expected to move into high gear this year, moving from 3.3% growth in 1991 to 6.7% and a still respectable 5.4% clip in 1993. At the same time, the IMF pro- jects that consumer inflation in develop- ing nations (excluding Eastern Europe and the former Soviet Union) will be cut in half between 1992 and 1993, falling from 37.6% to 16.1%. The agency notes that market-oriented structural reforms, along with deficit reduction and anti-in- flationary measures, "have improved the prospects for sustainable growth in a large number of developing nations."

WHAT'S GOOD FOR GENERAL MOTORS MAY BE GOOD FOR BUSH

Economist Sam I. Nakagama of Nakagama & Wallace Inc. thinks that "to what must be an uncomfortably large degree for Republicans, the success of George Bush's reelection campaign may rest with decisions made in Detroit." He points out that U.S. carmakers are plan- ning a big increase in production next quarter—pushing motor-vehicle output some 18% over last year's level.

By Nakagama's calculation, such a siz- able rise would alone be enough to add about 2 percentage points to economic growth in the third quarter. And that could raise the annual growth rate of gross domestic product to around 4%, when multiplier effects are added to the equation.

The problem for the Administration, of course, is that carmakers' plans are not cast in concrete. Nakagama points out that Detroit was also optimistic a year ago, when auto sales picked up in late spring, but pulled in its horns when car sales began to slump in July. "Since last year's slump in car sales came in the wake of a sharp slowdown in mone- tary growth," says Nakagama, "it's hard- ly surprising that Administration offi- cials have recently been trying to jawbone the Fed into boosting growth of M2, which has been shrinking lately."

AND NOW FOR SOMETHING COMPLETELY A DIFFERENT. THE ALL-NEW MAZDA 626.

We've created a distinctive car for those whose love of driving is exceeded only by their need for four doors. A car blessed with personality and panache all but lost in the everyday sedan. Outside, we've given the 626 sleek, liquid styling that you won't see at every stoplight in town. While inside, you can stretch out with more headroom and total legroom than Camry or Accord. And its 164-horsepower, aluminum alloy V6 is coupled to an advanced independent suspension, delivering a smooth, quick agility simply not found in the garden-variety people mover. So at the risk of standing out in a crowd, test-drive the all-new Mazda 626. It may still have four doors and a big trunk, but any resemblance to an ordinary sedan ends right there.

THE MAZDA 626 ES

Built at a state-of-the-art plant in Flat Rock, Michigan. 2.5L DOHC 24-valve V6, 4-wheel disc brakes and driver's-side air bag are standard. ABS is available, as well as leather-trimmed upholstery.* Best in class 36-month/50,000-mile, no-deductible, "bumper-to-bumper" limited warranty. See dealer for details. To get out of the ordinary, call 1-800-639-1000.

*Seats upholstered in leather except for rear sides of seatbacks and other minor areas.





mazda
IT JUST FEELS RIGHT.®

We weren't always old and conservative. We used to be young and conservative.

Trendsetters, we're not. But the investment policy we've had for the past 147 years has apparently become all the rage of late. Being on the safe side is in. Buttoned down is cool.

How could our founders, seated around a table in 1845, have predicted the financial climate of the early 1990s?

The answer is simple. They knew that the future would hold bad times as well as good.

And that a life insurance company, by its very nature, had a responsibility to its customers to weather the storms.

So they laid down a conservative investment philosophy, one that we have adhered to ever since, through thick as well as thin.

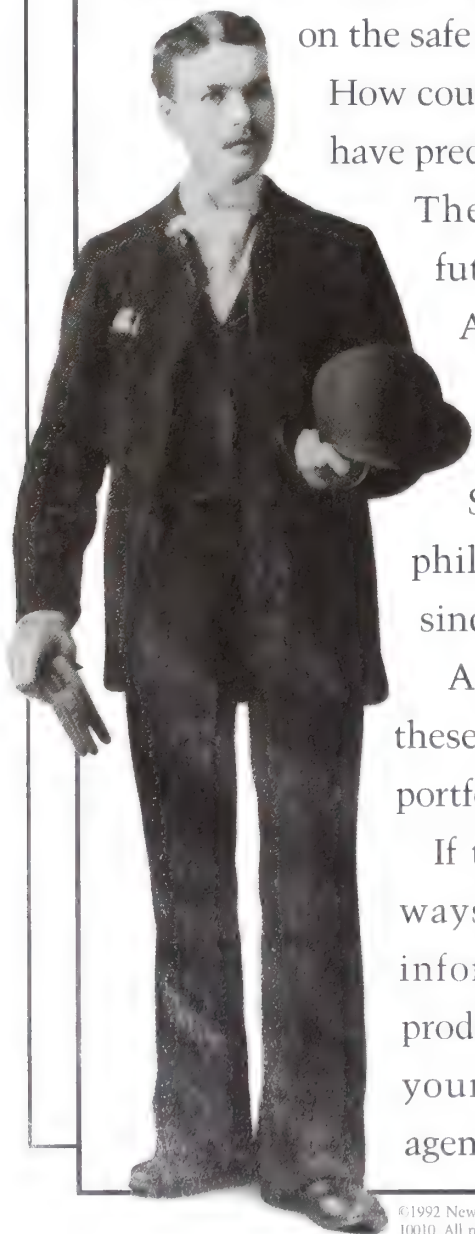
As a result, we're happy to report that even in these topsy-turvy times, 95% of the bonds in our portfolio are investment grade*.

If this is the price we pay for being set in our ways, we don't mind one little bit. For more information on any of our products and services, call your New York Life agent or 1-800-695-4331.



The Company You Keep.®

©1992 New York Life Insurance Company and New York Life Insurance and Annuity Corporation, 51 Madison Avenue, New York, N.Y. 10010. All rights reserved. *As of December 31, 1991, includes the bond portfolios of New York Life Insurance Company (NYLIC) and its subsidiary, New York Life Insurance and Annuity Corporation (NYLIAC), managed by New York Life Insurance Company. NYLIC has \$42.750 billion in assets and \$2.620 billion in surplus; NYLIAC has \$11.613 billion in assets and \$0.591 billion in surplus.



WRE, IT'S A TORTOISE RECOVERY. WHAT'S WHAT'S GOOD ABOUT IT

In the race toward recovery, the economy is playing the tortoise, not the hare. Growth is slow but steady. In coming quarters, that kind of business environment is bound to be frustrating as the economic data continue to lack the verve associated with past rebounds. Over the long haul, this slowpoke could be a winner, as modest growth will prolong the recovery by easing upward pressure off inflation and interest rates.

OUTPUT RECOVERS THE LOST GROUND



No one would be happier with that outcome than the policymakers at the Federal Reserve. And the Fed's June 17 survey of business conditions points to just that scenario. The results show that "economic activity continued to improve" in May and early June and that "price stability in the retailing and manufacturing sectors seems to be the rule" across the nation. Unlike last year, though, growth is not so slow that companies can't feel it. A better assessment of current conditions boosted confidence among U.S. executives in the second quarter to the highest level since 1984, says Conference Board. And Dun & Bradstreet Corp. reports that business expectations for third-quarter sales are up sharply, to their highest point in three years. Manufacturers are especially upbeat, says D&B. That makes sense. Demand has perked up, reflected in rising commodity prices and factory orders. Inventories are lean. And fatter factory payrolls this summer are a bet, because output is already picking up. Industrial production at factories, utilities, and mines rose 0.6% in May, the fourth consecutive gain. Factory output alone jumped 0.7%. Both gains were the largest in 12 months. Industrial production is now at its highest level in about a year and a half (chart).

WELCOME TO ACTION BUYING

Manufacturers can thank autos and housing for their heftier order books and their brighter spirits. Production of cars and light trucks—including minivans and SUVs—rose sharply in April and May, and recent strong auto sales will support Detroit's ambitious third-quarter output plans (page 82). Production of home appliances and furniture also posted healthy gains, and more autos are on the way. That's because the housing recovery remains on track. Single-family starts had tumbled 17.3% in April but bounced by 11% in May, to an annual rate of 1.23 million

(chart). Single-family starts alone rose by 9.8% in May, after dropping 10.9% in April. The May gains relieved some of the worry, caused by the April plunge, that the housing recovery was running out of steam.

The latest survey from the National Association of Home Builders also indicates that housing is in good shape. Although the June readings on home sales and buyer traffic slipped from May's high levels, both measures are far above their levels of last year, and the sales outlook for the next six months remains positive.

One reason for optimism is falling mortgage rates. The average rate on a 30-year fixed mortgage dropped to 8.61% in mid-June, the lowest level since January.

Of course, when people buy new homes, they need to furnish them. The housing recovery is a big reason why retail sales continue to climb. Sales rose 0.2% in May, after a 0.4% gain in April. Increased purchases at car dealers and furniture and department stores offset declines elsewhere in May.

Car dealers remained busy in early June. U.S.-made cars sold at a 6.5 million annual rate in the first 10 days, up from 6.3 million in May and 6 million in April. And light trucks sold at a hefty 4.7 million clip in early June.

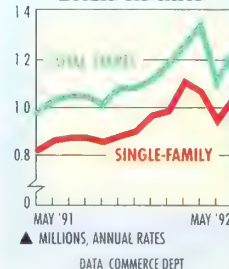
Increased buying of cars and trucks could mean another gain in retail sales this month. Slow job growth, however, is keeping this quarter's gains in consumer spending at a much more modest pace than in the first quarter. So far in the second period, retail sales are no higher than their average of the first quarter, when they surged at an 11.2% annual rate.

RETAILERS LAY IN MORE GOODS

Still, the rise in consumer spending is spurring retailers to restock their shelves. Total inventories held by manufacturers, wholesalers, and retailers rose by just 0.1% in April. But broken down, the data show that retail stock levels jumped 1.1%, while factory and wholesale inventories declined.

Recent growth in retail sales and inventories have not entirely benefited American producers, though. That's because imports are taking an increasing share of retail dollars. In general, the yearly growth in imports of nonauto consumer goods follows the combined pace of retail sales and inventories. But since mid-1991, imports—up some 19% over the past year—have grown far

HOUSING BOUNCES BACK IN MAY



Business Outlook

faster than nonauto retail activity, which is up just 3.7%.

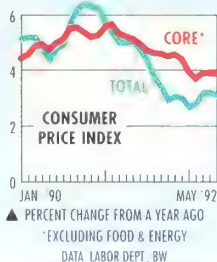
Rising imports will lessen the growth in real gross domestic product in the second quarter. However, foreign competition is one of many reasons why inflation this year will remain very tame.

PRICE PRESSURES ARE UNDER CONTROL

The subpar recovery is the main reason why inflation will stay modest. Price pressures will build more slowly than they would if the rebound was closer to the average postwar experience. That means the Federal Reserve will have more freedom to keep interest rates down as the upturn progresses. And any Fed tightening will begin much later into the recovery.

To be sure, the Fed isn't likely to hike interest rates anytime soon, out of fear that inflation needs some restraint (chart). The business climate remains clearly disinflationary. From the demand side, a lackluster economy means that the pace of jobs and incomes—and thus consumer spending—is only modest. And the growth of money and credit remains sluggish.

ALL QUIET ON THE INFLATION FRONT



On the cost side, wage growth is slowing down, and productivity gains will further retard the growth of unit labor costs. Output per hour in non-farm industries rose 2.7%, at an annual rate, in the first quarter. Combined with the 2.2% rise in wages and benefits, the productivity gain means that unit labor costs fell 0.5%.

As productivity posts its typical recovery pickup, the labor cost of producing a unit of output will continue to grow slowly. During the past year, unit labor costs have risen a mere 1.2%—the slowest yearly growth in eight years and well below the pace of retail prices. Modest gains in unit costs mean that

businesses will be able to enjoy fatter profit margins without generating upward pressure on prices.

Also, plenty of industrial capacity remains idle. Operating rates for all industry rose to 79% in May, from 78.7% in April. However, capacity in use is higher than it was a year ago (chart). And it is still well below the rate of about 83% that is typically associated with supply conditions conducive to price hikes.

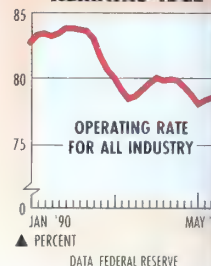
The latest price indexes reflect this disinflationary environment. The producer price index for finished goods rose 0.4% in May. The core PPI, which excludes energy and food, was up 0.6%. However, one-time jumps in prices of tobacco products, up 7.3%, and aircraft, up 1.2%, accounted for about half of both of those increases. Through May, annual inflation in the PPI is running at only 1.2%, and the core rate is 2.8%.

The news from the consumer price index is more encouraging. The CPI rose a scant 0.1% in May, and excluding food and energy it was up a modest 0.2%. During the past year, consumer price inflation has fallen to 3.1%. And the core rate is ensconced below 4% for the first time in five years. That suggests fundamental, not transitory, improvement.

In fact, some of inflation's toughest areas are showing moderation. Price growth in services, for example, has cooled from 6% in early 1991. Now, it has fallen to 4.1%. Even costs of medical services are slowing down.

A modest recovery that will slowly bring down the jobless rate while keeping pressure off inflation seems to be the Fed's goal. So far, this tortoise economy continues to crawl forward. But if the central bank decides that it needs a prod, low inflation will give the Fed a leeway to nudge interest rates another notch lower.

A LOT OF CAPACITY REMAINS IDLE



THE WEEK AHEAD

DURABLE-GOODS ORDERS

Wednesday, June 24, 8:30 a.m.

New orders taken by durable-goods manufacturers probably increased by 1% in May, say economists surveyed by MMS International, a division of McGraw-Hill Inc. That's suggested by the 1.3% jump in durable-goods output. Orders have increased for four consecutive months, including a 1.3% gain in April. Despite the steady gain in new demand, the backlog of unfilled orders remains weak. It has fallen for eight months in a row.

CAR SALES

Wednesday, June 24

New domestic-made cars likely sold at an annual rate of about 6.3 million in the

middle of June, after selling at a 6.5 million pace in the first 10 days of this month. Cars sold at a 6.3 million rate for all of May. The auto industry finally seems to be launching a recovery. And Detroit is also getting a boost from the increased demand for light trucks, which sold at a 4.7 million rate in early June.

INITIAL UNEMPLOYMENT CLAIMS

Thursday, June 25, 8:30 a.m.

New filings for state unemployment benefits probably stood at an annual rate of 410,000 in the week ended June 13. In the week ended May 30, 407,000 claims were recorded, but economists had expected filings to dip below 400,000 because state employment offices were closed on Memorial Day, May 25.

PERSONAL INCOME

Friday, June 26, 10 a.m.

Personal income likely increased by a modest 0.4% in May, after a weak 0.1% rise in April, says the MMS report. Wages and salaries, flat in April, probably got a healthy boost in May from a 12-minute increase in the factory wage week. Consumer spending probably also increased by 0.4% in May, after a 0.1% advance in April. That's suggested by a 0.2% rise in retail sales and a pickup in demand for services. Sluggish growth is holding back the increases in consumer spending. The expected May advance means that so far in the second quarter, real consumer spending is unchanged from its first-quarter level.

YOU NEED SOMETHING YOU CAN DEPEND ON WHEN YOU GO FOR THE GREEN.

"I hate missing an important call as much as I hate missing a shot."

"That's why, whenever I'm out, I rely on the durability of my Motorola cellular phone. They're built to take whatever I dish out."

"It's the way smart people stay on top of their game."



MOTOROLA
Cellular Telephones

Technology that can take it.

Lee Trevino

APPLE? JAPAN CAN'T SAY NO

HOW APPLE IS EXPLOITING ITS RED-HOT SUCCESS

Just about every six weeks, even when things are hopping in Silicon Valley, Apple Computer Inc.'s John Sculley boards a plane and takes off for Japan. The chairman's trips are more than regular corporate travelthons. To Apple, they're the crucial component of a deadly serious mission. The goal? To win over the most sophisticated consumer-electronics market in the world.

The mission looks to be right on target. For starters, the company's sales in Japan are red hot. From a few thousand units in 1988, Apple Macintosh sales exploded to 55,000 in 1990, 120,000 in 1991, and a projected 180,000 this year (chart). Market share leaped accordingly, from less than 1% of the Japanese market in 1988 to nearly 6% now, says market researcher Dataquest Japan Ltd. Indeed, if the company can win just two more percentage points of the \$7 billion market, Apple will edge past IBM Japan to break into the country's top five of personal-computer sellers. And Mac sales are soaring despite a slumping market overall: Last year, PC sales in Japan contracted by 3%.

NEW DEALS. This year, Apple just may grab the honor, thanks to new distribution deals that could move it into Japan's lucrative corporate market. Since January, five major Japanese companies have signed up to sell Macs, including business-equipment giant Brother Industries, stationery leader Kokuyo, Mitsubishi, Sharp, and, in June, Minolta. Says Tokyo-based Dataquest analyst Katsushi Shiga: "I wouldn't be surprised to see them take 13% of the market."

But Japan represents much more than a new batch of customers for Apple. The company's Japanese connection is part of its core strategy to become a player in the world's gigantic consumer-electronics market and to pull away from the pack of U.S. personal-computer makers fighting for modest profits and tiny gains in market share. The strategy: Working with Japan's manufacturing giants, Apple will pour its distinctive

software into a new generation of consumer-electronics products. Apple wants to be, its executives often say, the Microsoft Corp. of consumer electronics.

To execute the strategy, Sculley has spent a good part of his time on those Asian trips building blue-chip alliances. The result: Sony Corp. manufactures Apple's smallest laptop, the PowerBook 100. Sharp Electronics Corp. will make Newton, Apple's brand-new electronic organizer. And insiders say Apple is close to announcing that Toshiba Corp. will manufacture a new, portable, color "multimedia" Mac that combines video, text, and sound. "Everyone wants to partner with us," boasts Satjiv Chahil, vice-president for marketing



**JANET JACKSON:
APPLE BACKED HER
1990 TOKYO SHOW—
AND GAVE AWAY
TONS OF BROCHURES**

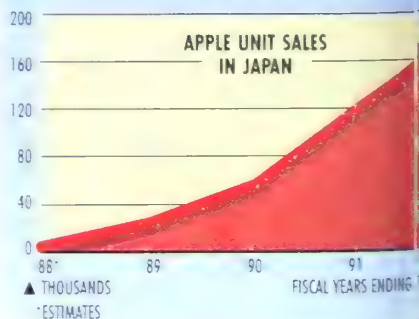


for Apple Pacific.

With the deals, Apple gains a competitive leg up on two of the computer industry's megatrends: the move toward ever smaller computers, and toward computer-cum-consumer-electronics machines. Indeed, while Compaq, Dell, IBM, and AST Research fight another vicious price war, this one launched June 15 by Compaq Computer Corp., Apple is marching toward whole new markets.



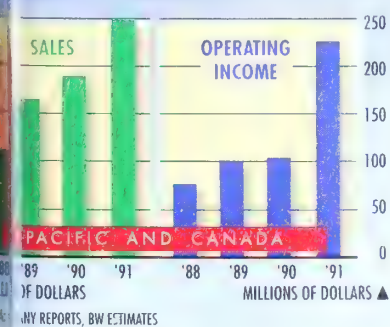
APPLE HAS CAUGHT ON IN JAPAN...





MACINTOSHES ARE BIG SELLERS, AND SO ARE APPLE GIMCRACKS, SUCH AS MUGS

LIVING REVENUES AND PROFITS UPWARD



The strategy has big risks. With so many irons in the fire, Apple could find itself overloaded and distracted. And by making its distinctive software so widely available, Apple could dilute its appeal. There's also the worry that Apple, which is manufacturing fewer of its own computers, may lose control of its destiny even as it's trying to make headway in the consumer-electronics field. But risks are better than failure, which until recently was Cupertino (Calif.)-based Apple's experience in Japan. "We were there for almost 10 years without success other than novelty sales," says Chahil. "We did everything wrong." Indeed, Apple didn't hit its stride until three years ago, thanks mostly to new Japanese-language software for the Mac, and some new executives, notably Shigechika Takeuchi, a former Toshiba executive in charge of Toshiba's laptop efforts.

Important, too, was a campaign aimed at building Apple's cachet. The company, for instance, played host to a 1990 Tokyo performance by Janet Jackson. The sexy pop star packed the house, and each of the 60,000 fans found a bag full of Apple literature on his or her chair.

HIP KITSCH. These days, Apple tries to foster its hip image by marketing its "Apple Collection" of T-shirts, jackets, coffee mugs, key chains, and other stuff through Tokyo retailers. Apple may shortly release a whole new line of such gear for Japan, Chahil says. Next up: an Apple-sponsored Japanese Ladies Professional Golf Assn. tourney in September.

Even without big sales in Japan, Apple probably would have been able to gain access to Japan's labs and negotiate deals with Japanese manufacturers. Nearly all U.S. PC makers, after all, have their own hookups with Japan's electronics giants. But Apple's determination to become a major Japanese player has plainly helped. "The Japanese are all scurrying to find higher ground," says Sheridan Tatsuno, author of *Technopolis Strategy: Japan, High Technology, and the Control of the 21st Century*.

ry. "One of the only places is Apple." Even competitors agree. "Apple is the only bright spot in the whole PC market," says Sharp Senior Executive Director Kozo Hayashi.

STACKS OF ORDERS. Apple's sales keep mounting. In April, the Nagoya University of Commerce and Business placed an order for 1,200 Apple notebook computers. And Mitsubishi soon will have an "Apple task force" of 50 engineers who will crisscross the company's vast client base pushing Mac-based networks.

Their sales target: \$238 million worth of Apple hardware,

software, and peripherals for the fiscal year ending in March, 1994. "It's time for Apple to become less like a venture business and more like Mitsubishi," explains Yukihiro Kayama, Mitsubishi's general manager for technology affairs. "And it's time for Mitsubishi to get more like Apple."

Apple is also pushing hard into Japan's primary and secondary schools. Over the next five years, the Education Ministry will put 400,000 computers into schools across Japan, where the Mac's easy-to-use reputation is spreading. Check out Tokyo's Meisei Elementary School. There, 41-year-old Hidenori Shimizu puts pupils in grades four through six through regular paces on 22 Macs, running games, painting, and science software. The teacher chose Apple because "I don't want the children to think of computers as something you have to study," he says. "The machines should help you do other things,

including enjoy yourself."

The Apple craze in Japan is raising fortunes for a host of smaller American companies. Aldus, Adobe Systems, and Quark are racing to "Japanize" their American software products. The same market is creating demand for other Mac-related gizmos. "Our products are flying off the shelves," says Laurin Herr, of SuperMac Technology, which makes color graphics gear for the Macintosh. And in any language, such words are music to Cupertino's ears.

By Neil Gross in Tokyo and Kathy Rebello in Cupertino, Calif.



**MORE LINKS:
APPLE WILL SPONSOR
A JAPANESE LADIES'
PRO GOLF TOURNEY
IN THE FALL**



RUSSIA



AT THE SUMMIT: THE MASSIVE NUCLEAR ARMS REDUCTION WAS THE EASY PART

A HANDSHAKE, BUT NO PROMISE

Bush didn't bail out Yeltsin—and U.S. companies are balking, too

The get-together had that painstakingly choreographed feel of past superpower confabs. George Bush and Boris Yeltsin chatted each other up in the Oval Office, exchanged gushing toasts at state dinners, and toured Chesapeake Bay. During their June 16-17 gathering, the leaders signed off on some 20 trade and technical pacts. Most significant of all, they agreed to a historic arms deal that would take an enormous bite out of their nuclear arsenals.

Even so, the affair had none of the high-stakes summit drama that once transfixed the world. The sessions were no meetings of equals. With the Russian economy in free-fall, Yeltsin and his thirtysomething team of reformers are groping for a financial lifeline. Unfortunately, a cash-strapped Bush Administration had little to offer.

Instead, the Russians got an earful of Washington's new mantra: Private investment will be your salvation. This

was pounded home at a hastily arranged "business summit" of U.S. and Russian executives hosted by the Commerce Dept. (box). Yeltsin got the message: "We're inviting the private sector of the U.S. to invest in the unique and untapped Russian market—don't be late!"

LONG SLOG. Trouble is, with few exceptions, U.S. companies aren't coming forward. Yeltsin has taken some steps to promote investment, such as planning to make the ruble convertible. And on July 17, Russia promised to offer foreign equity stakes in some Siberian gold and oil fields. But Russia is beset by an Alice Wonderland tax code, a wobbly banking system, and deepening insolvency. It won't get better soon. The International Monetary Fund is pressuring Yeltsin to get his economic house in order before the agency releases \$24 billion in Western aid approved this spring. To satisfy an IMF demand that he keep Russia's budget deficit at less than 5% of GNP, Yeltsin may have to slap even more taxes on foreign companies.

Yeltsin needs all the revenues he can get. Russia's foreign debt is a staggering \$80 billion, while its hard currency reserves are all but gone. Given the grim math, Moscow has little sympathy for complaints from Western companies. "We have a lot of pressures from various interests—and foreigners aren't the most important," snaps Foreign Relations Minister Pyotr Aven.

Until the economy stabilizes, foreign executives will find Russia a treacherous place to do business. The recent free fall of prices has made life difficult for Cummins Engine Co., which invested half a million dollars last October in a deal to ship engines to Russian truckmaker Kamaz. Now, Kamaz' factories are cutting output by a third. "The environment today looks a lot scarier than it did," says

THE RUSSIANS ARE HERE —AND THEY WANT TO MAKE MONEY

Dressed in a well-tailored suit, crisp Dior shirt, and fashionably bold tie, Andrei A. Stroyev looks like any other successful real estate developer. But rather than discussing depressed U.S. property prices, the chain-smoking chairman of Perestroika Joint Venture is enthusiastically selling luxury townhouses in Moscow.

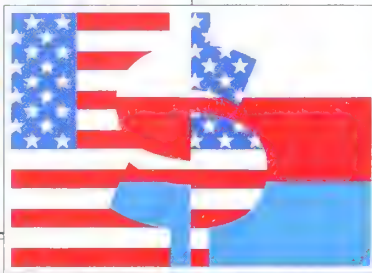
Stroyev's is the new face of Russian capitalism. He and some 70 other budding entrepreneurs joined Boris Yeltsin at the Washington summit, a showcase for the country's emerging business class. They carried a political message,

too. "We want to convince the U.S. that Russia is firmly on the way to a market economy," says Valeri I. Biryukov, head of the Ministry of Foreign Affairs' new business promotion department.

Russian organizers chose the entourage from a herd of 400 hopefuls. Although Yeltsin sees them as examples of his business reforms, many are stewards of rusting state enterprises. Most came to make money. While Yeltsin and President

Bush were announcing their arms deal, Stroyev, for instance, was busy up meetings with Salomon Brothers and Morgan Grenfell Capital Management Inc. He wants financing for a growing real estate empire. So far, having a tough time. "There's been a huge cultural gap," says Stroyev. His dealings with middle-aged American executives raised on cold war mistrust.

That hasn't been a problem for V. Mikhailov, general director of Plexys Corp., maker of the Soviet version of the Warsaw Pact high-tech goods standard and medical equipment. He recently inked a deal with Plexys International



THE DEMOCRATS' AGENDA-BENDERS

A pack of House conservatives is worsening the legislative gridlock

The June 11 defeat of the constitutional amendment requiring a balanced budget was one of those awful moments that have become all too common in Washington. Not that the amendment itself was much of a loss. But the spectacle again revealed a Congress and a President impotent in the face of a critical national challenge—more evidence that policy gridlock will plague the capital until at least after the November elections.

The vote was a major embarrassment for President Bush, who belatedly threw his prestige behind the amendment only to see it fail. And while victorious, the Democrats' leadership in the House also was humiliated by the whole affair. They could muster barely a third of the House on the issue.

'HUGE LOSS.' That vote was a stinging message from a growing group of Democratic conservatives led by Representative Charles W. Stenholm (D-Tex.), who sponsored the balanced-budget amendment. Stenholm, who can count on 65 solid votes, has made his mark already this year on several crucial issues. His group sank a Democratic "tax-fairness" bill that would have raised taxes on the wealthy to pay for new tax breaks for business and the middle class. They also stymied a leadership effort to shift billions of dollars in defense spending to domestic programs. And they watered down an urban aid package that Majority Leader Richard Gephardt (D-Mo.) pushed in the wake of the Los Angeles riots. The next test could come in July, when Democratic leaders try to push an aggressive health care reform package.

For its part, the White House had been certain it couldn't lose. If the amendment passed, the President would claim full credit. If it went down, he would blast Congress for fiscal irresponsibility. But the strategy failed on both

counts. As the House was voting, Bush was being teargassed off a Panama City podium. So much for rallying the legislative troops. And the White House has failed to follow up with an aggressive counterattack against the amendment's Democratic opponents.

NECESSARY WEEVILS. Bush's highly partisan blasts in advance of the vote may even have hurt the measure's chances.

The amendment needed broad Democratic support to pass. But at the last moment, some Democrats switched because they felt they were being manipulated by the GOP. Others dropped out after Bush refused to promise to push for cuts in Medicare and other entitlements. "This was a huge loss for Bush," says one GOP strategist. "At a time when the Democrats were flat on the run, he couldn't take advantage."

That may please Ross Perot, but it's hardly good news for Democratic bosses. They may have turned back the amendment, but they were abandoned by 116 Democrats who supported it. The Stenholm coalition is of small use to Bush. Because he hasn't much of an agenda of his own, he can't emulate Reagan, who worked with Stenholm and other Democratic "boll weevils" to build a working majority for his programs in 1981-82.

The result is that Washington will keep on sinking into the ooze of inaction. One example: A group of House Democrats, led by Budget Committee Chairman Leon E. Panetta (D-Calif.), will try in a few weeks to pass a new budget-enforcement plan that could provide a road map out of the fiscal swamp. But without strong party leadership, the measure is likely to die.

The outlook for the rest of the year, then, is more of the same. Only worse. Says former Congressional Budget Office Director Rudolph G. Penner: "It's back to business as usual."

By Howard Gleckman in Washington



GEPHARDT'S URBAN AID PACKAGE WAS WATERED DOWN BY STENHOLM

n L. Becker, director of business development at Cummins.

Two U.S. oil outfits have far more at stake. Phibro Energy Inc. in Greenwich, Conn., a unit of Salomon Inc., and An-Suisse Inc. of Houston sank \$100 million-plus into its White Nights venture to develop oil fields in western Siberia over the past 18 months. But virtually all their profits have been wiped out by a 100-per-barrel severance tax. Now, the Russians are mulling a dollar hike in the price. Warns Richard Lewis, director of oil for Ernst & Young Vnesheconsult in Moscow: "Seven dollars will be the nail in the coffin" for future oil investment.

SNAG. That sort of harsh treatment even the best-heeled companies can't shake away. American Telephone & Telegraph Co.'s investment of less than \$100 million has yielded only a few millions in profits so far in the former Soviet Union. Poland, by contrast, AT&T is generating \$100 million a year in business.

The private sector isn't alone in casting a wary eye on Russia. Faced with a mounting deficit and domestic demands, Congress has little appetite for pumping money into an economic basket case. So lawmakers have balked at approving the U.S. share of the \$24 billion aid package. And Yeltsin also undercut his position by disclosing that Americans captured in Vietnam may still be alive in the former Soviet Union. Congress threatened to delay aid until more details are unearthed about the fate of GIs, though Yeltsin headed off the problem with pledges of prompt disclosure.

No question, Bush got a lift from the tax cuts, among the biggest ever provided. Unfortunately for him and Yeltsin, future dealings may not be so smooth—particularly when it comes to the far stickier issue of spending U.S. taxpayers' money in Russia.

By Brian Bremner and Amy Borrus in Washington, with Rose Brady in Moscow

Naperville (Ill.) telecommunications company will cooperate on cellular phone service in Moscow. Mikhailov has already led himself with a phalanx of lawyers from Steptoe & Johnson and consultants from Booz, Allen & Hamilton Inc.

THE BOX. The Russians aren't the ones angling for a few bucks. Vym-S. partners see "a treasure box of money" in the company, says Booz Alfred P. Winbourne. The partners have a few baubles—they will be fronted, in dollars, for advice. Later, they pocket a slice of future revenues from high-tech wizardry.

Herein lies Russia's first lesson in American-style: If you want to do it, you gotta pay.

By Borrus and Brian Bremner in Moscow



ROGERS: A \$2 BILLION UPGRADE FOR UNITEL

IS CANADA READY FOR THE NEXT MCI?

Canada's long-distance market opens—and entrepreneurs are pouncing

Canada's June 12 decision to permit competition in long-distance telephone service would seem to be a gold mine for AT&T, MCI, and Sprint. After all, the opening comes at a time when the U.S.-Canada Free Trade Agreement is phasing out most barriers between the world's two largest trading partners. And Canadian business is desperate for the superior services and cheaper rates offered in the U.S.

But American carriers won't be the big winners in this market opening, at least in the early going. That's because the Canadians are hoping to reap the benefits of U.S.-style competition without inviting Americans all the way into their \$6 billion long-distance market.

STEEP RATES. Canadian-owned Unitel Communications Inc. is the most ambitious competitor. The upstart already brings in more than \$400 million annually, primarily from offering private data networks to business. It now plans to spend \$2 billion to enter the voice market and expand its fiber-based national network. Unitel's chairman, E.S. (Ted) Rogers, has said he's out to end the "Soviet-style communications monopolism" of the Canadian phone companies.

For the moment, Rogers will mainly have to worry about Canadian rivals. The reason: Canadian regulators and lawmakers fear that rapidly opening their borders to U.S. carriers could wipe

out their domestic players. Linda C. Gervais, a spokeswoman for Bell Canada, which is unaffiliated with America's Baby Bells or American Telephone & Telegraph Co., notes that AT&T alone could carry virtually all of Canada's long-distance traffic on its existing spare capacity. So the Canadians want to get into fighting trim. Says Gervais: "It's only a question of time before [U.S.

	
LONG-DISTANCE DIFFERENCE	
10-minute call at peak rates*	
NEW YORK TO SEATTLE	\$2.50
MONTREAL TO VANCOUVER	\$3.94
*U.S. DOLLARS	DATA: AT&T, LYNX TECHNOLOGIES INC.

competition] increases, and that has always been our preoccupation."

Canadian businesses, meanwhile, are preoccupied with their long-distance phone bills, which subsidize cheap local service. Peak rates for long-distance phone calls are around 60% higher in Canada (table), and the discrepancy is even greater for specialized services, which when available can cost up to five times as much north of the border. High

long-distance costs forced the Royal Bank of Canada to defer the introduction of a service allowing customers to call up electronic pictures of checks at banking terminals.

Recognizing that Canadian businesses need cheaper phone service to compete globally, Ottawa gave the green light to companies proposing to compete in long-distance service against the monopoly controlled by Bell Canada and the provincial phone companies. But Canadian officials want to go only so far. To keep Canada for the Canadians, Parliament is considering legislation that would in effect limit foreigners to a 20% stake in any Canadian phone company except those with preexisting foreign ownership. Some Canadian businesses are lobbying against the bill. "This is an industry that needs capital," says Monty Richardson, executive director of the Communications Competition Coalition, an alliance of Canadian corporations.

LOCAL GIANTS. That capital, though, will have to come from within Canada's borders. A few small U.S. companies are reselling long-distance service bought wholesale from Bell Canada and others, but the Big Three U.S. carriers have pressed Ottawa for greater access. Unitel Communications Corp. says it has no interest in jeopardizing ties with the Canadian carriers with which it trades huge volumes of cross-border calls. And AT&T offers high-speed data transmission and other advanced services only across the border, not between points inside Canada. In the longer term, though, analysts say the big U.S. carriers may choose to build a larger presence in Canada. AT&T, which is building networks in Europe and Asia that compete with national carriers, declines to comment on its plans for northward expansion.

If the Big Three take off to the Great White North, they may have two local giants to contend with. Unitel has the financial muscle to make a serious run. It is 60%-owned by Canadian Pacific Ltd., the second-biggest conglomerate in Canada after BCE Inc., Bell Canada's parent. The remaining 40% is held by Rogers Communications Inc., a sprawling cable-TV and cellular empire that Rogers controls.

The fight is already heating up. On June 16, Bell Canada Chairman Jerome Monty vowed the company would "fight like hell" in the new environment. Unitel CEO George E. Harvey responds: "If we can't move faster than them, we don't deserve to be in the business." However the battle turns out, U.S.-style competition in long distance, with or without Americans—is bound to sharpen Canada's competitive edge.

By William C. Symonds in Toronto

H, WHAT A LOVELY RE WAR

Travel-related industries are feasting after a two-year fast



WARRIOR: IT'S PLUSH TIMES AGAIN FOR SAN FRANCISCO'S JEFF AXELROD

Jeffrey Axelrod thought he had lost his customer. Then, after more than two years, the San Francisco-based manufacturer got the call: an order for 10,000 new terry cloth robes to swaddle a horde of expected guests at the St. Francis Hotel. And that's not the phones at Axelrod's Ax'ent Inc. have been ringing steadily in the wake of recent airfare wars. For the first time in oh so long, Axelrod's clientele is busily preparing for a needed flood of travelers. "You must feel it in the industry. There's a buzz," he says. From robes to honeyed peanuts, travel- and hospitality-industry suppliers big and small, coast to coast—are feeling the effects of a recently ended airfare sale. It's Christmas in June—July and August—didn't get cheap. The beleaguered suppliers themselves stand to reap up to \$500 million on the new gambit. But at the same time, they've filled their pipelines, jump-starting the summer travel season. "The end of the century certainly is a boost to the nation's economy," American Airlines Chairman Robert L. Crandall told a gathering of

travel agents in Dallas. "It will create at least 70,000 new jobs in the U.S. and stimulate our domestic economy to the tune of \$2.5 billion this summer."

COUPES TO NUTS. Economists would quibble with that estimate, but the boom is definitely on. The travel business had been in a two-year slump until May 28, when the mother of all fare wars broke out. Thousands of eager travelers rushed to beat the June 5 deadline. And as a result, the airlines have filled 95% of their seats for the summer travel season, vs. average summer capacity of about 60%.

FARE WARS: THE RIPPLE EFFECT

The airlines' cutthroat pricing sent ticket sales soaring—and generated a considerable ripple through the economy. Some examples:

- HERTZ** With summer bookings up 25%, the car-rental outfit is adding 30,000 cars to its fleet
- EAGLE SNACKS** You know those little in-flight bags of peanuts? Anheuser-Busch's Eagle is cranking out 30 million extra
- AX'ENT** This maker of terrycloth bathrobes just picked up a 1,000-robe order worth \$28,000 from a nearly forgotten hotel customer
- AMTRAK** Flying is cheap, so advance reservations are off 4% from last year
- TRAVEL AGENTS** Swamped by trade-ins of higher-priced tickets, some agents did three times the work for half the money
- NEWSPAPERS** Airline advertising dried up completely as soon as the fare frenzy ended

Some related players felt the heat right away. Three days into the fare war, Hertz Corp. bought 20,000 new cars to meet demand for rentals. It also held on to 10,000 vehicles scheduled to go out of service. Hertz, which is 49%-owned by Ford Motor Co., went so far as to buy GM cars to fill the gaps in its fleet. "Frankly, we took whatever we could get, from anywhere," explains Craig R. Koch, a Hertz executive vice-president.

For others, the good times are only beginning to roll. Dallas-based Eagle Snacks Inc., a unit of Anheuser-Busch Cos., is gearing up for a 15%-to-20% increase in orders for peanuts and other in-flight snacks. At Form Plastics Co., an unexpected influx of fresh orders will keep the production line busy all summer. The company, located near Chicago's O'Hare International Airport, sells the lightweight plastic dishes used to prepare airline meals. The company says its revenues will jump 18% to 21% from last year's \$12 million as a result of increased summer travel.

But not everyone is thrilled with the fare war. Amtrak, for one, saw its sales slump 4% during the skirmish. And many of the nation's travel agents complain of being overworked and unprepared for the cuts. Charles J. Roumas, marketing vice-president at Travel One Inc. in Mount Laurel, N.J., says tensions around his office were so high during the fare war that when airline reps came for appointments, he didn't dare let reservations clerks see them. "It was to the point that I couldn't allow an airline rep to walk through the office," he says. "They literally would have been lynched on the spot."

LIMITED VISIBILITY. Some suppliers are beginning to worry about a slump once the discount tickets are all used up. Chicago's Culinary Foods Inc., which caters in-flight meals, will see a 20% surge in revenues over the next two months, predicts Ina F. Manaster, vice-president for sales. "It's going to be a nice summer, but we'll see how long a winter it's going to be," she says.

Many of the travel boom's beneficiaries are content to let the future take care of itself. Pedro Weiner, a merchant at Fisherman's Wharf, the San Francisco tourist mecca, is increasing his inventory of sweaters, leather goods, and upscale sportswear by 10%. "You have to take a gamble," he reasons. For Weiner and many others in the tourist and travel trade, whatever the fall brings, a blazing summer rebound is already here.

By Maria Mallory in Pittsburgh, with Greg Bouens in Detroit and bureau reports

DATA: BW

GERRY GROFF/SIPA

INVESTIGATIONS



UNDER FIRE:
A SEARS TIRE &
SHOP IN LOS
ANGELES

HOW DID SEARS BLOW THIS GASKET?

Some say the retailer's push for profits sparked its auto-repair woes

Two years ago, with his job apparently on the line, Sears Roebuck Chairman Edward A. Brennan scrambled to shake up the retail giant. He slashed costs by \$600 million in 1991, began renovating the company's 868 lackluster stores, and pushed new low prices. The overall thrust: make every employee, from the sales floor to the chairman's suite, focus on profits.

That may have been the germ of trouble. The downside of Brennan's big shakeup became all too clear on June 11, when California charged that the state's 72 Sears Tire & Auto Centers had systematically ripped off customers. The Consumer Affairs Dept., which conducted a yearlong undercover investigation, alleges that Sears made unnecessary auto repairs. Now, the department wants to shut down all of Sears' auto operations in the state. Says Consumer Affairs' Bureau of Auto Repair Program Manager Allen D. Wood: "People trusted Sears, and the company took advantage of them."

The trouble is likely to spread. Several states, including Florida, Illinois, and New York are studying California's action. And on June

15, New Jersey, after a four-month undercover operation, accused six Sears auto centers, along with five unrelated repair shops, of doing unneeded work.

The controversy raises concerns that Sears' drive to boost profit and revenue may have run amok. Wall Street analysts and some shareholders worry that the boardroom pressure on Brennan trickled down to the shop floor. Indeed, the California agency says that complaints about Sears Tire & Auto Centers jumped by 29% in 1990 and an additional 27% in 1991—just as Brennan's new programs took hold. "Absent a coherent growth strategy, these sorts of things can happen," says dissident shareholder Robert Monks, who has unsuccessfully

sought a Sears, Roebuck & Co. board seat.

Sears strenuously denies any wrongdoing. "There's lots of room to dispute these charges," says San Francisco attorney Dirk Schenkkan, who represents Sears in the California case. Schenkkan accuses the Consumer Affairs Dept. whose funding is threatened by California budget cuts, of beating up on Sears to boost its own standing. And Sears claims Consumer Affairs confused preventive-maintenance suggestions with attempts to defraud consumers.

INCENTIVES. But Ruth Hernandez of Stockton, Calif., doesn't buy that. In October, she went to Sears to buy tires for her 1986 Honda Accord. The mechanic who worked on the car insisted she also needed new struts, at a cost of \$419.95. Hernandez, 53, sought a second opinion, and another auto-repair shop told her the struts were fine. A month later, Hernandez returned to Sears, where she says a sheepish mechanic admitted the diagnosis was wrong. "I kept thinking," she adds, "how many other people is this happened to?"

Too many, claims Consumer Affairs. In its undercover investigation begun in late 1990, the agency found that on 34 of 38 undercover runs, Sears charged an average \$235 for unnecessary repairs.

What was the problem? Consumer Affairs officials say Sears pressured employees to sell, setting high quotas. Sales commissions and incentives, such as free trips for top sellers, may have contributed to the high-pressure atmosphere, suggests Bureau of Auto Repair chief James Schoning. Sears says its compensation system conforms to industry standards, that sales goals are reasonable, and that it emphasizes "outstanding service," not revenues.

At stake is Sears' license to operate its auto centers in California. If they close, Sears would lose up to \$200 million in annual revenue, says Prudential Securities Inc. But with over 3,000 jobs on the line, and with the state in recession, a settlement could be in the offing.

The news couldn't have come at a worse time for Brennan. On June 15, Sears' board agreed to adopt reforms supported by dissidents, including confidential voting for shareholders and a requirement that directors own 1,000 Sears shares. If, with the auto controversy heating up, those minor repairs don't figure to keep Brennan out of hot water,

By Kevin Kelly in Chicago
with Eric Schine in Los Angeles

SEARS TIRE & AUTO CENTERS

ESTIMATED ANNUAL SALES
\$2 billion

TOTAL OUTLETS
850

MAJOR REVENUE SOURCES
Batteries, tires, service

MAJOR BRANDS
Goodyear, Delco, Motorcraft

SOURCE: COMPANY REPORTS
PRUDENTIAL SECURITIES INC. ESTIMATE



BRENNAN: DID THE TROUBLE BEGIN WITH HIS SHAKEUP?

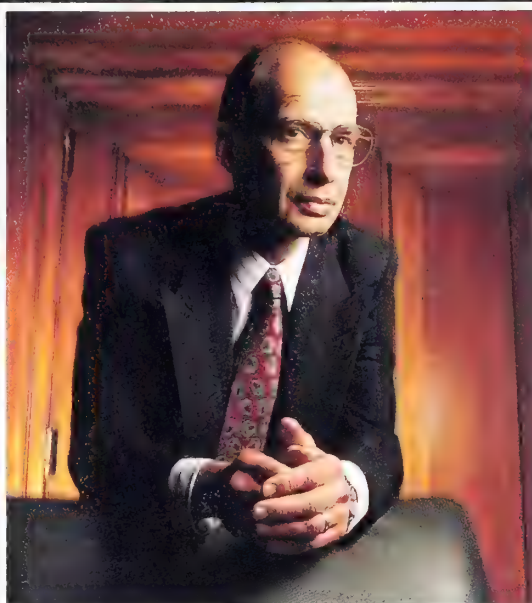
BEAUTY AND THE EASTLINESS

fits drop, and things get not so tidy at Elizabeth Arden

you can't get excited about a \$100,000 diamond-studded bottle of perfume, about whether a new fragrance should be called No No, or about big movie stars, half-dressed Swedish models, and "revolutionary" lipsticks, the beauty business isn't for you. Don't be fooled by all the glamour and glitz. The \$10 billion fragrance-and-cosmetics industry is a brutal place—one where reputations are made or destroyed by products that cost practically nothing to make but millions to market. Joseph F. Ronchetti's abrupt resignation on June 11 shows how brutal it can be. During 14 years as CEO of Elizabeth Arden Co., the 51-year-old Ronchetti survived four different owners and gave the company's image a makeover. He introduced several high-profile new products and won two prestigious Fragrance Foundation (FiFi) awards for his launch of Elizabeth Taylor's fragrance, White Diamonds.

Elizabeth Arden, which was bought by American Unilever PLC in 1990, hasn't been as profitable as its sister company, in Klein Cosmetics Corp. For Unilever, which saw its North American operating profits drop 8% last year, to \$590 million on \$8.4 billion in sales, that was enough to force a realignment of the over-the-counter products division. The upshot? Ronchetti is out and his boss, Robert M. Phillips, 53, is in. Phillips is taking over as Arden's CEO and becomes chairman of Unilever's new Prestige Personal Products Group, which includes the \$300 million Calvin Klein fragrance operation. What you're seeing here is a lot of tension on the part of Unilever," says Edwin Rice, executive director of the consultant Landor Associates in San Francisco. "They're very tough operators."

LET SMARTS. Ronchetti will continue as co-chairman and consultant until his contract expires in August. Reached at home in Manhattan, he is sanguine about his fate. "Unilever had acquired a group of managers, and we were sort of hired guns," he says. "To be honest, it did not come as a surprise." Ronchetti, a former Arden salesman who was hired in 1966 during the regime of Elizabeth Arden, had developed solid relationships with the department stores that carried his products. He is one of these scrappy guys who



PHILLIPS: SCOTCHING RUMORS OF A SELL-OFF

made it on his own street smarts," says one cosmetics industry veteran. "Though he was doing wonderful things in the marketplace, business was not so terrific." Ronchetti concedes that Arden's earnings last year were hurting. "Unilever certainly hasn't gotten a return on their investment as yet," he says. But "we're ahead of profit plans for the year."

ELIZABETH II. The appointment of Phillips, a Columbia MBA who has spent years marketing beauty products for large public companies (table), seems to signal not only that Unilever wants a significant return on its investment, but also that the entire prestige beauty market is changing. "Come on, it's a stupid business," says Joseph Kozloff, a cosmetics and soap analyst at Smith Barney, Harris Upham & Co. "It's glitzy and all that crap, but it's going to have to be much more disciplined as the packaged-goods companies get involved."

Although some on Wall Street specu-

late that the appointment also signals Unilever's intention to sell off the Arden-Klein division, Phillips says that's news to him. "In the beauty business, there are constant rumors," he says. "That's one I'm not aware of." Says a Unilever spokesman: "We would never comment on rumors." Phillips says his main concern is to stabilize a company that's "really been through a dramatic change." After being owned by the Bank of New York, Eli Lilly, Fabergé, and now Unilever, "We really need to get the organization in a more stable frame of mind and focus on being innovative."

Among expected introductions: the U.S. launch of the fragrance Chloé Narcisse, distribution of Klein and Arden products in Western Europe, and a new Liz Taylor fragrance. With all that and more, Phillips figures to remain a busy man in this brutal business of beauty—so long as Unilever keeps smiling.

By Laura Zann in New York

ROBERT M. PHILLIPS

PERSONAL

Age: 53

Hometown: Montclair, N.J.

EDUCATION

Dartmouth College, BA, 1960

Columbia University,

MBA, 1962

CAREER TRACK

Held product marketing jobs at Bristol-Myers' Clairol unit, and Chesebrough-Pond's. Last post: Chairman, Unilever's Chesebrough-Pond's USA, Arden, and Calvin Klein group

FAVORITE FRAGRANCE

Calvin Klein's Eternity for Men

DATA: COMPANY REPORTS, BW

PRIVACY

SNOOPING ON BEHALF OF THE RIGHT TO PRIVACY

A book exposes Dan Rather's credit file to prove how easy it is to do

It's a topsy-turvy case. On one side is Journalist A, who advocates tighter controls on the release of information about consumers. To prove his point, he may have invaded someone else's privacy. His target is Journalist B, well-known as a staunch supporter of the First Amendment. He, in turn, goes to great lengths to prevent the information about himself from being published.

It all stems from a forthcoming book, *Privacy For Sale*. In it, author Jeffrey Rothfeder, a former BUSINESS WEEK editor, describes how he surreptitiously obtained the credit report and charge-card data, among other items, of CBS Evening News anchor Dan Rather. When he learned of the disclosures, Rather put his attorneys to work: Publisher Simon & Schuster delayed the book's publica-

tion date for about two months while the two sides haggled over what would be printed, Rothfeder says. A spokesman for the publisher says that the delay was caused by editing the Rather material.

ODD CASE. Now, the book is set for release in August. Rothfeder says he was forced to rewrite parts of the manuscript and to omit details about where Rather lives, shops, and dines, and the amounts he spent. Still included is information about Rather's mortgage, credit history, and general shopping and dining habits. His Social Security number and credit card numbers were never included.

Rothfeder says he collected Rather's data to make a point: that it's too easy for just about anyone to obtain such information, using ordinary PCs. This isn't the first time Rothfeder has tapped into the records of a prominent person. For a 1989 *BUSINESS WEEK* cover story, he obtained a copy of Vice-President Dan Quayle's credit report. *BUSINESS WEEK* disclosed only tidbits of Quayle data, including his habit of shopping at Sears, Roebuck & Co. The article prompted



RATHER'S LAWYERS GOT SOME DATA KEPT OUT OF THE BOOK

Equifax Inc., the keeper of Quayle's record, to tighten its policy concerning third parties that resell its reports, says John A. Baker, senior vice-president of Equifax, one of the three corporations that maintain credit data on most Americans.

The Rather case is unusual for several reasons. While it's common for people mentioned in a book to demand manuscript changes, "given all their legal protection, publishers rarely change something simply because of threats," says Richard Kurnit, a New York publishing lawyer.

It's equally rare for a high-profile journalist such as Rather, who has spent a career reporting about other people's activities, to raise issues of personal privacy. Through a CBS spokeswoman, Rather says that he was "concerned that the information was gathered illegally or through criminal acts."

Getting such data for anything other than a legitimate business purpose is illegal under the Fair Credit Reporting Act, says Lucy Morris, assistant director of credit practices at the Federal Trade Commission. Consumers, for instance,

would first have to commit to buying a car or a house before a business could get their financial data, she says.

Rothfeder denies he did anything illegal, saying he retrieved the data for his book, which is a "business purpose." He says he got the Rather data with help from an outlaw information broker. He says that "John Branch," the information broker in his book, is a composite character. The broker supplied access codes so Rothfeder could use a PC to get a copy of Rather's Equifax credit report.

HARD TO PROVE. The CBS spokeswoman says Rather has no plans to take further legal action, though Rothfeder says Rather has refused to sign an agreement precluding a lawsuit. Legal experts say Rather wouldn't have much of a case anyway. To win an invasion-of-privacy suit, the news anchor would have to prove damages and show that the information was intentionally harmful. "That's a very hard case to make," says Janlori Goldman, a privacy expert with the American Civil Liberties Union.

The episode may stir more controversy about how private consumer information really is. "The [Quayle] experience was educational for us," says Equifax's Baker of Rothfeder's first scoop. "I'm surprised that he did it again." For consumers, what might be surprising, no, dismaying—is that Rothfeder didn't have much trouble doing it again.

By Evan I. Schwartz, with Michael Galen, in New York

AIDS

MAGIC'S BLOCKED SHOT

His AIDS book could help teens—only some retailers won't carry it

On June 7, Abigail Van Buren devoted her "Dear Abby" column to Earvin "Magic" Johnson's new book, *What You Can Do To Avoid AIDS*. Buy "one for yourself and one for someone you care about," she urged. Just don't look for it at Kmart or Walgreen, a Deerfield (Ill.) drugstore chain with more than 1,700 outlets. They won't stock the book, which is addressed to teenagers.

The decision has public health officials shaking their heads in frustration. Government statistics suggest that teens increasingly are at risk of contracting AIDS, so effective warnings are a public health priority. And the kids Johnson is trying to reach are more likely to hang out in a Kmart or a drugstore than a

bookstore, says Peter L. Osnos, publisher of Times Books, the Random House Inc. division putting out Johnson's book.

What You Can Do... highlights a battle brewing in the government and school systems over how best to educate teens about sex and AIDS. Johnson's book is a frank discussion of the disease. That candor is the problem, says Osnos. He says Kmart Corp. and Walgreen Co. objected to the use of slang to help define a few anatomical terms and a diagram illustrating how to use a condom.

RIGHT TONE. Kmart made a marketing decision, says spokeswoman Mary McGeachy: "The teenage market doesn't shop for books at Kmart." So Kmart will sell Johnson's book through its Walden-Books Inc. chain. A Walgreen spokesman likens the chain's refusal to carry the book to

its policy of not selling skin magazines.

Proponents of Johnson's \$3.99 book, whose net profits go to the Magic Johnson Foundation, feel that the book's tone is right on the mark for teens. "If you want to reach kids, you have to use the language they understand," says Dr. Alan Rosenfield, Dean of the School of Public Health at Columbia University.

Kmart and Walgreen are far from alone in their stance on graphic language. Objections to explicit questions about sex led Health & Human Services Secretary Louis W. Sullivan last year to block federal funding of a survey on teen sexual behavior. New York City and Jacksonville, Fla., foes of a proposed AIDS curriculum felt discussions of sex were too frank and that abstinence wasn't stressed enough.

AIDS activists say those arguments mis-

What You Can Do To Avoid AIDS
EARVIN "MAGIC" JOHNSON
PROCEEDS OF THE \$3.99 BOOK GO TO AIDS RESEARCH

Thinking ahead
in a changing world.

Somewhere amidst the self-defeating fury of inventive thinking that is today's PC marketplace, someone had to start thinking of ways to make obsolescence a thing of the past.

Someone had to make growth and change part of a grand design.

Someone had to view PCs as a major investment...and have the vision to protect it.

That's the kind of thinking that won Best of COMDEX for our new Z•NOTE[®].

That's the thinking behind the investment protection, integrated connectivity, ease of use, design and ergonomics of our new Z series of notebook and desktop PCs and network servers.

Call 1-800-472-3699, Ext. 106 to see what the Z series is all about.

It's called Thinking Ahead.



ZENITH DATA SYSTEMS

A Bull Company

Thinking Ahead.

Z•NOTE is a trademark of Zenith Data Systems Corporation
copyright © 1992 Zenith Data Systems Corporation



The Z series

the point. "This is an example of the ostrich theory," says the Reverend Margaret Reinfeld, an Episcopal priest and director of education and international programs at the American Foundation for AIDS Research. "If we don't acknowledge [teen sex], it doesn't exist." Fact is, teens are having sex, much of it risky. A study released by the Urban Institute in Washington reported that just half of

the 900 sexually active men aged 17 to 19 surveyed use condoms.

Worse, the Centers for Disease Control reports that HIV infection may be spreading rapidly among teenagers. Through March, 1992, there had been 821 cases of full-blown AIDS among teens. But there were nearly 8,600 among those aged 20 to 24 and 34,000 among those 25 to 29. Since the CDC

estimates the average time between HIV infection and full-blown AIDS is 10 years, it's likely that most of those people were infected during adolescence.

The book soon may spark another controversy: Osnos reports that school systems across the country are reviewing That's sure to anger some parents—although perhaps save some kids' lives.

By Naomi Freundlich in New York

Commentary/by Ron Stodghill II and Nicole Harris

BLACK ATHLETES COULD BE HEROIC OUTSIDE THE ARENA, TOO

Football legend Jim Brown, in his crusade against apathy among black athletes, has labeled them a bunch of "misguided young men." Craig Hodges of the Chicago Bulls has blasted his own superstar teammate, Michael Jordan, for not speaking out on social and political issues. And Jesse Jackson has begun sermonizing about pro black athletes committing more personal and financial resources.

What specifically can these black success stories do to help the African-American community? On the surface, the notion of a few well-heeled athletes waging a war on poverty seems naive. After all, Jordan and other stars already do substantial charitable work. Do they really bear any greater responsibility for righting the nation's wrongs than the rest of society? Their collective fortunes are puny when set against the social ills plaguing black communities. And as Detroit Pistons guard Isiah Thomas points out: "Just because a guy can slam-dunk a basketball or throw a football doesn't mean you want him speaking out on social issues."

Maybe not. But few have even tried. As precious commodities in the multi-billion-dollar sports industry and as celebrity pitchmen for major U.S. companies, they do carry tremendous clout. And sports stars command the respect and admiration of today's youth as few others can. So why aren't pro black athletes making more noise?

CORPORATE PRESSURE. Apathy is one reason. Enjoying a life of fancy cars, expensive suburban homes, and off-season jaunts abroad, many black pro athletes are insulated from everyday struggles. Sports agent Leigh Steinberg, known for urging his clients to become more active in social causes, says he's amazed at how a hefty contract can turn a poor kid from the

ghetto into a self-absorbed millionaire who's "always bitching and moaning about taxes."

Another big reason they're not more involved, though, is that social activism is often frowned upon by team owners as well as the companies that hire pros as product spokesmen. As Philip de Picciotto, managing director of sports marketing firm Advantage International, puts it: "Companies go for athletes with the broadest appeal—and that means the least controversial."

But as highly sought-after pitchmen, black athletes are in a rare position to make a few demands themselves. Says Richard Lapchick, director of Northeastern University's Center for the Study of Sport: "If an athlete says, 'I'm not going to endorse your product until you get involved in the community,' the company's going to listen." Black owners of inner-city sporting goods stores, for example, often complain that they face difficulty lining up shipments from major manufacturers of shoes, clothing, and equipment. Black athletes could push those companies to expand their use of black-owned businesses as retail outlets.

Black pro athletes could also use their stardom to pressure leagues and teams. Thanks to Jordan's feats, the Bulls are a safe bet to sell out every home game until the end of the century. So why couldn't Jordan demand

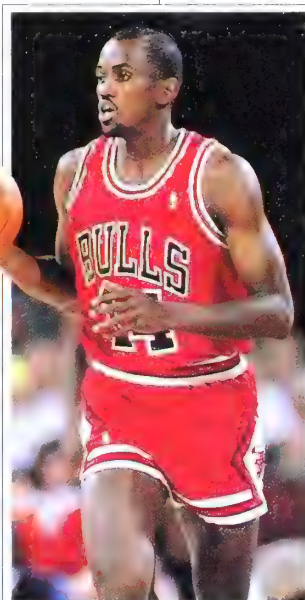
that Bulls principal owner Jerry M. Reinsdorf donate a small portion of his gate receipts to a local public school? Similarly, players' associations could press the leagues to spend a percentage of revenues on social programs.

ALL TALK. There are small signs of change. To negotiate his multimillion-dollar contract with the Green Bay Packers, first-round draft choice Terrell Buckley bypassed

the big names and hired fledgling black agent Carl Poston of Houston. "I've seen so many black pro athletes come back to the neighborhood and preach but never take any action," Buckley says. "I wanted to combat the stereotype that if you deal with a black business, you get ripped off and you lose." His choice may seem little more than symbolic, but investing in black businesses is a critical first step in empowering black communities economically.

As Steinberg puts it, "Athletes need to envision themselves as more than simply ath-

letes." That's a difficult notion in a society that has come to expect little more from its pro players than fresh material for the highlight films. But Jesse Owens, Jackie Robinson, and Olympic sprinters Tommie Smith and John Carlos are heroes among blacks not just for their athletic accomplishments. They put themselves at risk to stand for racial equality and dignity. How much are today's black pro athletes willing to risk?



THE BULLS' HODGES: PUSHING FOR SOCIAL ACTIVISM



The new HP PaintJet XL300 lets you make a splash without getting soaked.

last. A printer with fantastic color and a brilliantly low price. \$3,495.

Vivid color has never been so affordable. Hewlett-Packard introduces the PaintJet XL300 inkjet printer. Now you can get laser-quality color printing for about half of what you'd expect to pay. Only \$3,495.*

With access to millions of colors, you'll be amazed at the output you can create. Rich, vibrant, professional color graphics. Crisp, clear, laser-quality text. And you can print in a wide variety of sizes, on a choice of media that includes plain or glossy paper and transparencies.

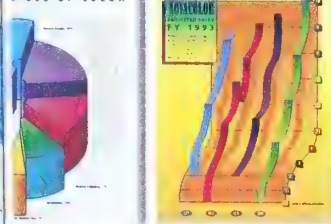
As versatile as it is practical, the PaintJet XL300 switches effort-

lessly between PCs and Macintosh. And, with HP LaserJet printer compatibility built right in, the PaintJet XL300 lets you run all the popular software.

Now that there's a color printer as practical as the PaintJet XL300, maybe it's time you took the plunge into color. Call **1-800-752-0900, Ext. 3160** for a free print sample and the name of the authorized HP dealer nearest you.



USE OF COLOR



EDITED BY HARRIS COLLINGWOOD

BOARDROOM DEBATE

When it comes to pay, CEOs and their boards don't see eye to eye. Coopers & Lybrand recently surveyed more than 500 CEOs and more than 500 board members to gauge the strength of their agreement or disagreement with a series of statements. Here's the percentage of CEOs or directors who strongly agreed with the following propositions:

CEOs Directors

Fuller disclosure of total executive compensation packages is necessary **30%** **59%**

Shareholders should have a stronger influence on executive compensation practices **12%** **31%**

Stock options should be extended to all employees **17%** **20%**

The CEO should not also be chairman of the board **22%** **34%**

DATA: COOPERS & LYBRAND

PEROT IS RAINING ON MEXICO'S PARADE

► Ross Perot's Presidential campaign is spooking investors in Mexico. The once-booming Mexican Bolsa de Valores, which had held steady for three months, took a nosedive in mid-June, losing 15%, when Perot's campaign heated up (page 46). The Texas billionaire doesn't like the proposed North American Free Trade Agreement.

To make matters worse, investors got wind that the Mexican telephone workers' union plans to sell its stake in market leader Teléfonos de Mexico. And the U.S. Supreme Court's June 15 ruling that the American government could kidnap Mexican nationals chilled bilateral relations. Investors now wonder if their fiesta is over.

TYCO TOYS TAKES A MARKET TUMBLE

► Tyco Toys was flying high until a June 17 sell-off drove the stock down 11.1%, to 16. Industry sources say that in-

vestors got a case of the jitters when they heard that Kenneth Heebner, a money manager with Boston's Capital Growth Management, was unloading as many as 1.4 million shares. Heebner's response: "I don't know what all the fuss is about. Maybe I didn't sell."

Some speculate that Heebner may have reacted to a report by investment analyst Thomas Kully of William Blair & Co. "The only thing we said is that a couple of [Tyco's] products were a touch slower," says Kully. Tyco Chief Executive Richard Grey shrugs off the stock drop. "A short-term weakness in a couple of categories is not significant to our overall results," he says.

INTEL VS. AMD: SCORE ONE FOR INTEL

► Intel is closer to stopping rival Advanced Micro Devices from selling clones of Intel's most popular chips. On June 17, a federal jury in San Jose, Calif., decided that AMD didn't have the right to use proprietary Intel software embedded in AMD's clone of the Intel 287 chip. The verdict also affects AMD's clone of the widely used Intel 386 chip and could delay by several months AMD's plans to introduce a 486 clone by yearend.

AMD has one more legal worry. An arbitrator has

...IS THE PHYSICIAN NAMED RICH DOCTOR?

He began his career as a counselor for disturbed children, but it was as a banker that he made a name for himself. As of June 5, Independent Bank Corp. in Ionia, Mich., has a new president: Charles Van Loan.

Some people's names and jobs are combinations made in heaven. The new associate pastor at Central Presbyterian Church in Denver is Amy Miracle. San Franciscan Les Plack is an advertisement for himself: He's a dentist. Michelle Magazine is senior vice-president of, yes, magazine publishing at Scholastic Inc. Reece Overcash is chairman of The Associates, a profitable financial firm. And CNN Washington Bureau Chief William Headline must have interviewed Joseph Coyne, public relations chief at the Federal Reserve.

Some names, though, are almost too right. The head of Hughes Aircraft's cloak-and-dagger computer-security business? Morgan Death.



ruled that AMD can sell its version of the 386, but another Intel suit argues that AMD can't use Intel software in it.

DID AN IBM VETERAN PAY FOR OS/2'S BUGS?

► IBM says the new version of its OS/2 operating system will snatch sales from Microsoft's popular Windows software. But while OS/2 has sold 400,000 copies in its first two months on the market, customers have complained of minor but annoying glitches. IBM has been working to fix the bugs.

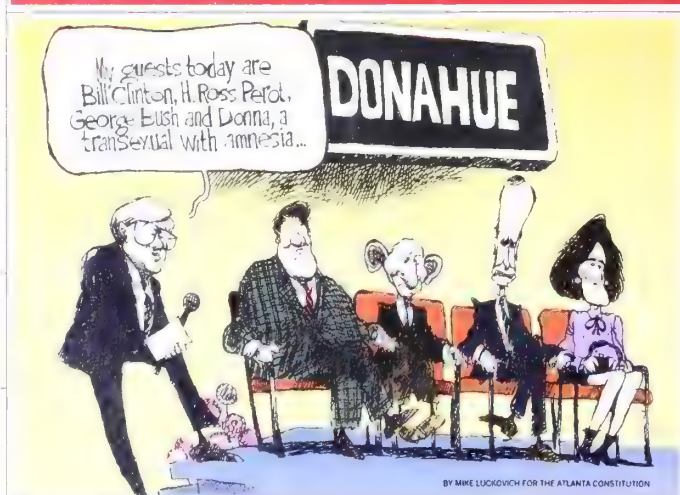
Now, Tom Steele, director

of the 400-programmer Boca Raton (Fla.) outpost that developed OS/2, has resigned unexpectedly after 28 years with IBM. Sources close to Steele believe Steele took the fall for the problems IBM is having with the 2-million-line program. Steele says he could not pass up a job offer from computer maker Intergraph in Alabama, where he was raised.

CATWOMAN IS A HIT AT FREDERICK'S

► Even before it opens, *Catwoman Returns* is a big hit at Frederick's of Hollywood. Frederick's faithful are scrambling to buy slinky getups much like the one worn by Michelle Pfeiffer, who plays Catwoman in the Warner Bros. film. The risqué retailer reports sales are up by 30% for their Catsuit, a body-hugging unitard in lace or lycra. Frederick's 195 lingerie shop sells six different styles for to \$50.

Five years back, Frederick's reports, it did a booming business in push-up bras following release of the film *Dangerous Liaisons*. The genuine whose plunging neckline inspired the copycat. None other than Michelle Pfeiffer.



Costlier than a corporate jet.

The company mail cart has quietly become a vehicle of runaway abuse. According to a Wall Street Journal report, the impulse to "overnight it" needlessly cost American businesses over \$3 billion last year.

No one is more alarmed by this than UPS, because no one is more qualified to prevent it. After all, we offer you a broad array of cost-effective shipping

options. Including ground, two-day air, and international air. As well as overnight air delivery Monday to Saturday for far less than our competitors charge.

If that kind of cost control appeals to you, just call UPS. We consider every package to be a priority. We just don't price them that way. We run the tightest ship in the shipping business.®



THE SEARCH FOR PEROT'S ACHILLES' HEEL

In just three months, Ross Perot has gone from being a blip on political radar screens to master of the universe. Or at least master of the opinion polls, where he leads both President Bush and Bill Clinton. But to turn a slim June margin into a November victory, Perot faces an immense challenge: He must not only hold together but also build on a coalition united by nothing but contempt for politics as usual. And he must pull this off without being seen as another conventional politician.

As leader of the pack, Perot is everyone's target. His foes, especially President Bush, are concentrating their attack on his volatile personality. Voters' first impression of him was overwhelmingly positive: a self-made billionaire who solves problems instead of talking about them. But recent news reports have shown a different Perot: a man who spied on employees and perceived enemies, a hot-tempered combatant with an almost paranoid edge, and an adventurer willing to join in the schemes of former White House aide Oliver North.

'TEMPERAMENTAL'? To derail the Perot express, opponents must portray him as someone who is "unpredictable and potentially reckless," says political scientist Earl Black of the University of South Carolina. That's why Vice-President Dan Quayle recently dismissed Perot as a "temperamental tycoon" who would shred the Constitution. But so far, the assault has had little effect.

Perhaps a bigger challenge for the feisty Texan is protecting his position as a nonpolitician—even as his still undeclared candidacy grows more credible and as he hires Washington veterans to run his campaign. To a large extent, Perot is still riding the strength of not being in either party. A recent Times Mirror survey showed that Desert Storm

commander General H. Norman Schwarzkopf would do no less well as Perot in a race with Bush and Clinton.

Perot's opponents are trying to fill in the details by painting him as the consummate insider, a man who turned his close links with the Nixon Administration to business advantage. A recent *Washington Post*/ABC News Poll suggests that Perot's past business and political activities present another line of attack: Voters overwhelmingly said they would be less likely to support any candidate who made a fortune doing business

with the government or who had been a big Nixon campaign contributor.

TIGHTROPE WALK. Finally, there's the nettlesome matter of issues. Perot, who draws support from across the political spectrum, will find it hard to refine his positions without losing followers. As Perot has begun to get specific, he has started to sound, well, like a politician. Trying to avoid what he called "a political circus," he retreated from a pledge to testify before a Senate committee on his knowledge of Americans missing in Vietnam. It would have been his first sworn statement on the explosive subject. He has ditched bold talk about cutting Social Security benefits for the wealthy. And he reacted to supporters' jitters that he would raise taxes by moving perilously closer to a "read my lips" pledge. Says Bush adviser Charles Black: "If you can't stick to one position through a short campaign, how can people trust him to stick with it in the White House?"

To get there, Ross Perot faces a very long tightrope walk. Yet even if voters develop doubts, the good news for him is that they show no sign of increased enthusiasm for either Bush or Clinton. A Perot victory remains improbable. But he would have bet just a few weeks ago that he would be leading the polls at midyear?

By Richard S. Dunham



THE GOP ONSLAUGHT IS ONLY BEGINNING

CAPITAL WRAPUP

LIBERALS

Bill Clinton may have helped his cause with moderates and conservatives by picking a fight with Jesse Jackson over antiwhite comments made by rap singer Sister Souljah. But the Arkansas governor is cozying up to another icon of the Democratic left, New York Governor Mario M. Cuomo. His reason: Polls show Clinton trailing in New York, a state he must win to be elected President. In a June 16 cable-TV appearance, Clinton said that as President, he might name Cuomo to the U.S. Supreme Court. And while Clinton aides are cooling toward a Cuomo plan to tie the Presidential cam-

paign more closely to the Democratic congressional leadership, Clinton himself continues to cite Cuomo as a key policy adviser.

STRADDLES

Demonstrating exactly what voters are fed up with, many in Congress still seem to believe that they can have it both ways: It turns out that 200 of the 280 House members who supported a balanced-budget constitutional amendment on June 11 earlier voted to ease restrictions on earnings by Social Security recipients. The provision would increase benefits by \$7.3 billion a year—but without any offsetting spending cuts or tax increases.

ABORTION

The Feminist Majority Foundation is stepping up its pressure to get Germany's Hoechst and France's Rhône-Poulenc to sell their abortion drug RU486 in the U.S. The group is urging shareholders—including big pension funds—to press the pharmaceutical makers to seek Food & Drug Administration approval of RU486. Trying to avoid the vicious politics of abortion, the European manufacturers had earlier chosen to forgo the U.S. market. So the group plans to leaflet shoppers who may buy products containing textiles made by New Jersey-based Hoechst Celanese Corp.



Global Communications—Close at Hand

BT gives you global communication tools as convenient as your briefcase. In any time zone, in any office. We'll help you take your business further, but keep you closer to your customers, your goals, your target.

BT has a global presence our competition can't match. We speak the language, know the culture. Our TYMNET® Global Network reaches 90% of the world's business centers in more than 100 countries. We monitor our own technology, and bill in one currency, part of a single-vendor solution that makes your life easier.

We help you plan your network, manage it, make sure everything plugs in where it should and meets the regulations it should, at locations worldwide. Our Global Network Services™ (GNS) bring your far-flung divisions closer, with international messaging, frame relay, transaction services, and EDI.

Grab the BT briefcase. Call **1-800-872-7654** (US) or **1-800-874-7654** (Canada). BT North America, 2560 North First Street, PO Box 49019, San Jose, CA 95161.

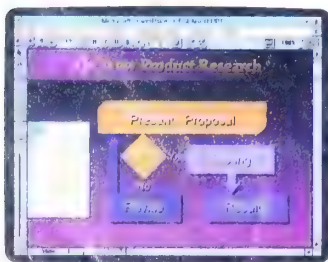
**Global Network Services • ExpressLANE™ Frame Relay/LAN Interconnectivity
Videoconferencing • EDI*NET® • BT Messaging Services • Electronic Transaction Services**



Mary Sue Will You

PowerPoint 3.0. Because deserves a great pre

It's been said that the most valuable currency in the '90s will be



With our unique Shape tool, you needn't be an artist to easily create terrific diagrams that result in eye-catching, professional overheads, 35mm slides or on-screen presentations.

ideas. But having an idea and communicating an idea are two entirely different things. Which brings us to our point. Or rather, PowerPoint. How do you turn your ideas, the points that you want to make, into powerful, convincing presentations?

Consider Microsoft® PowerPoint® presentation graphics program for



great idea itiation.

Windows™. It will, most immediately, help you get your ideas down, and then help you organize exactly what it is you want to say. Secondly, it will assist you in making sure all of your presentation materials not only look great, but make a very strong business impression as well.

Let's begin with ideas. First

you want to get them down. With PowerPoint, you can work out your entire presentation in Outline View. Or you can develop your thoughts right on your slides. The next step is to graphically express those ideas. With PowerPoint, your choices are astounding. Over 150 templates you can easily apply at any time to give your presentation a professional look. A Shape Tool that lets you easily create diagrams from a palette of commonly used shapes. Plus 84 styles of graphs, including 3-D graphs that rotate. And with the Slide Master feature, you can easily make last-minute changes to your master slide (like adding a logo, for example), and all your other slides will automatically change. So only one change is necessary.



PowerPoint takes full advantage of new Windows 3.1, and is a part of Microsoft's family of integrated software products for the Windows operating system.

Now everything is in place. Everything makes sense. Everything looks terrific. So go ahead. Feel confident about your presentation. After all, now it's as great as your ideas.

If you'd like to hear more about the PowerPoint program, including our 90-day money-back guarantee, call (800) 541-1261, Dept. A24. Or visit your nearest Microsoft reseller.

Microsoft
Making it easier



LOADING CARGO:
WILL JAPAN EXPO
ITS WAY OUT OF
RECESSION?

JAPAN

JAPAN OPENS THE EXPORT SPIGOT

Its surplus is widening—and so far, the U.S. isn't complaining

Life has been grim of late for Fuji Machine Manufacturing Co., a maker of machine tools and automatic assemblers for circuit boards near Nagoya. During this year's first quarter, Japan's sputtering economy dragged down Fuji's sales. But suddenly, there's good news. Fuji's first-half sales to overseas customers, including such U.S. companies as IBM and American Telephone & Telegraph Co., now seem likely to jump 32%.

Fuji Machine's performance is one sign that Japan, once again, may export its way out of recession. Mounting surpluses with the U.S. could further strain U.S.-Japanese economic relations and risk a new political backlash in this election year. What makes this so sensitive is evidence that the chronic Japanese trade surplus with the U.S., rather than shrinking, could widen as the U.S. economy recov-

ers. Besides consumers snapping up Japanese products, American companies are turning to Japan for the capital goods and components they need to compete. And, contrary to American expectations, Japan's "transplant" factories in the U.S. are adding to the widening gap.

Look at the numbers. During the first quarter, Japanese exports—led by autos,

semiconductors, and office equipment—rose by 8.1% from the same period last year. And as the domestic market cools, imports are bound to sink. As a result, after three years of decline, Japan's trade surplus with the U.S. is headed again, to around \$51 billion this year from \$47 billion in 1991 (chart). "Japan today is running monthly surpluses as large as the annual surpluses of the 1970s," says Senior Economist Kenneth S. Curtis of Deutsche Bank Capital Markets (Asia) Ltd. in Tokyo. He sees the overall trade surplus rising to a record \$135 billion this year.

So far, the new runup has generated hardly a whimper from George Bush. Ever since his market-opening trip to Japan ended in disaster last January, he has been running for cover on trade, leaving the tough talk to rival Rep. Perot. "Japan is just too important to be hostile to," says a senior U.S. official. And if the Japanese are worried, they're not showing it. In fact, the Ministry of International Trade & Industry in early July released a seven-year study calling the U.S. an "unfair" trade partner. **NEW MARKETS.** But Tokyo's surpluses may have become more deeply embedded than ever in the structure of its trade. In the past five years, Japanese companies have spent \$3 trillion on new plants and equipment. The result, in some industries, is excess production capacity—and a powerful incentive to export.

WHERE AMERICA'S TRADE DEFICIT ISN'T SHRINKING



SUDDENLY, NO MORE JOBS ON A SILVER PLATTER

The economic downturn is giving Japan's college grads the jitters

It was known as an *urite shijo*, or seller's market. Scrambling to keep up with Japan's hot-growth economy in the late 1980s, companies swamped college seniors at elite schools with job offers. They were treated to lavish dinners and nights out singing at *karaoke* bars. So intense was the competition that company gumshoes occasionally tailed recruits after they got job offers to make sure other companies weren't courting them.

That's history now. New graduates are the ones scrambling, as sales of everything from camcorders to autos nose-dive. Top manufacturers such as Nissan Motor, Matsushita Electric Industrial, and Sony are suddenly cooling on new hires. Leading retailer Takashimaya Co. is slashing new jobs by 20% to cope with weak consumer spending. Brokers such as Nomura Securities Co. and Daiwa Securities Co., bruised by the collapse of the Tokyo stock market, have cut hiring by over half.

Yet the bleaker prospects for graduates may actually be good news for U.S. and other foreign companies operating in Japan. The weak economy could "give us an opportunity to interview more talented people," says Hiroyuki Ishikawa, head of personnel at Citibank's Japan subsidiary. A ban on recruiting until early July imposed by the Labor Ministry on top Japanese companies may also be steering more students toward foreign companies, which are not bound by the rule. Ishikawa started receiving job inquiries from students in February, two months earlier than usual. He had to turn away 200 students wishing to attend a May information session.

FACING REALITY. Japanese companies have come to realize that they may have been too generous with their welcome mats in the past. During the late 1980s, payrolls expanded dramatically as companies feared labor shortages in such fast-growing fields as computers, robots, and autos. Now, companies are slashing more than just capital investment. "We'd like to keep hiring at a

constant rate," says Shinji Tamura, head of personnel at Toshiba Corp. "But we have to face reality." While hirings are down, salaries usually aren't cut.

Not surprisingly, the turn of events has triggered some hysteria among Japan's young job seekers. "It's really terrible," frets an international business major at Aoyama Gakuin University in Tokyo. "All of us are worried." At Sophia University, the spartan counseling office has been a mob scene. Grim-faced students anxiously thumb through thick computer lists of companies and recently graduated "old boys" and "old girls,"

hunting for contacts who can provide key introductions. Still, even that tried-and-true tactic is fast becoming a dead end. This year, some companies are instructing young employees to avoid private meetings with job seekers. "It's a reversal," says Katsu Tanaka, career counseling chief at Sophia. "The companies have completely changed their attitudes." To be noticed, some students have adopted more aggressive interview tactics such as abandoning honorific language during interviews and making direct eye contact—considered rude in Japan.

Job prospects this year for graduating women may be worse than for men. Although Japan's corporate structure continues to be male-dominated, a few companies in recent years have started to hire women for such full-time professional positions as marketing and design. But now there are worries that the economic slowdown will seriously dampen such hiring. "It's always been tough for women," says a 21-year-old female student at Sophia who hopes to work for Bank of Tokyo Ltd. What's more, in Japan, the door to a top-tier Japanese company usually opens just once. By contrast, Americans climbing the executive ladder can easily job-hop in mid-career. That puts even more pressure on the Japanese grad looking for that critical first job. Now, how do you say "buyer's market" in Japanese?

By Ted Holden in Tokyo



GRIM-FACED JOB HUNTERS AT SOPHIA UNIVERSITY HUNT FOR CONTACTS

or example, sluggish demand will force Mitsubishi Petrochemical Co. to export ethylene from a new plant that will be on-line this year. And the precision-machine industry, which includes cameras and watches, is staggering under huge inventories. One result: Fuji Photo Film Co. plans to start exporting 100 camcorders a month to the U.S. Southeast Asia. And it intends to start those exports to 50,000 a month in a few years.

The Japanese want to slow the growth of surpluses with major trading partners, however. Japan is shifting some exports toward the Middle East and China, where it has trade deficits. Mitsubishi Motors Corp., for example, plans to start exports to Australia this year by 10,000 vehicles, even as exports to other markets slip a bit.

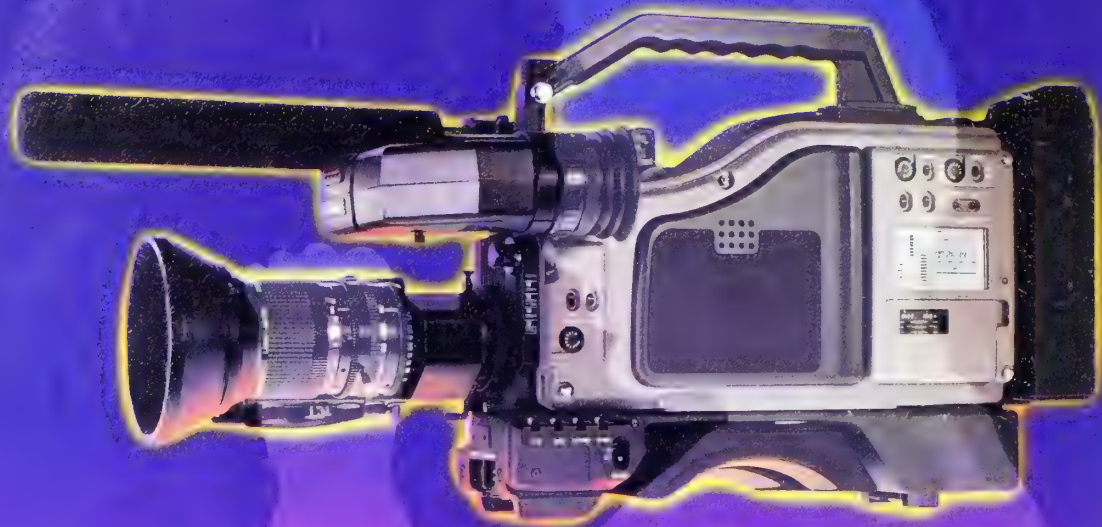
Even so, a key Japanese export target is the U.S. capital-goods market, as economic recovery triggers renewed U.S. investment in plants and equipment. In machine tools, well-heel Japanese companies are stocking U.S. warehouses with inventories of standard equipment, says Dennis T. Casey, president of Van Dorn Plastic Machinery Co., a Strongsville, Ohio, maker of injection-molding machinery. While it takes Van Dorn six weeks to fill an order, the Japanese can deliver from inventory in two to five days—and even let customers use the machinery on a six-month trial. "The Japanese can drive you out if they let it to," says Casey.

BALANCE. Large amounts of Japanese machinery are also being pulled into the U.S. by the auto transplants and by Detroit's Big Three. General Motors Corp.'s Saturn plant, for example, uses Japanese injection-molding equipment. But the transplants create a growing appetite for Japanese auto parts. So, the U.S. deficit in auto-parts trade with Japan is likely to balloon, offsetting the expected drop in finished auto imports. In fact, the only solution to the chronic trade imbalance may be massive U.S. direct investment in Japan, according to Dennis J. Encarnation, a professor at Harvard Business School. That's because two-thirds to three-quarters of U.S.-Japan trade is intracompany, he argues in a new book. And Japanese companies have many more U.S. operations investing in capital goods and parts than Americans have in Japan. "The deficit could worsen if U.S. companies don't establish a stronger presence in the Japanese market," Encarnation says.

That's a long-term process, of course. Now, Japan's best hope of ducking U.S. trade recriminations is that the Perot campaign fizzles—and Bush and Clinton keep looking the other way.

Robert Neff in Tokyo, with Paul Magson in Washington and bureau reports

Human Electronics—Technology for the Benefit of Mankind.



Panasonic

Official Sponsor
1992 U.S. Olympic Team



D-3 format was developed by NHK.

There's one winning performance
you won't read about. But you'll see it, hear it and
feel it every time you watch the Olympic Games.

You see every drop of sweat, and it gives you the chills. You're watching the Barcelona Olympic Games captured by a Panasonic D-3 1/2" Digital Video System, the equipment chosen by networks from America, Europe and Japan. They'll be using over 1200 units of the Panasonic D-3 1/2" Digital Video System to bring all the action home to you.

This Panasonic D-3 1/2" Digital Video System is capable of producing images with startling detail and sound that's as clear as a compact disc. The small 1/2" digital video cassette tape allows Panasonic video equipment to be compact, lightweight and maneuverable. This means broadcasters can easily cover the Barcelona Olympic Games from almost every angle possible. And because the entire system is digital, it can duplicate and edit programs for broadcast without any video or audio degradation.

Of all the triumphs of the Olympic Games, there's one you won't read about, but you'll see it, you'll hear it and you'll feel it when you watch the Games. It's the D-3 1/2" Digital Video System from Panasonic.

Panasonic

MATSUSHITA ELECTRIC

AN LBO THAT WENT OVER LIKE A SOGGY TEABAG

Can Wasserstein salvage its stake in Britain's Isosceles supermarkets?



Europe had never seen anything like it before—nor has it since. Eager to make their mark in Europe, two U.S. dealmakers began slugging it out in 1989 over Britain's Gateway PLC, a lackluster 830-unit supermarket chain. After a three-month battle, a group led by Wasserstein, Perella & Co. outpointed Kohlberg Kravis Roberts & Co. by pushing the price up 35% over the initial offer, to \$3.3 billion.

But now, Wasserstein Perella's brash victory in the Old World is proving rather hollow. Laden with debt taken on at the market's peak, the renamed chain, Isosceles PLC, with \$5.5 billion in sales, is being squeezed by free-spending and well-heeled rivals such as J. Sainsbury PLC and Tesco PLC. Interest charges—the chief legacy of the buyout—will wipe out estimated operating profits of about \$323 million for the year ended Apr. 25. Now close to breaching loan agreements with the banks, Isosceles executives and investors are locked in financial restructuring talks—the second round since interest on some \$555 million in debt was deferred 18 months ago.

DEAD WRONG. For Wasserstein Perella, the battle this summer is to salvage its \$350 million investment, easily the largest chunk of its \$1 billion leveraged-buyout fund. Isosceles has been “a disappointment,” admits one Wasserstein

Perella executive. Joining Wasserstein around the negotiating table is an international cast of investors, which includes lenders such as Chemical Bank, General Electric Capital, and Industrial Bank of Japan, along with equity players such as British investment managers Mercury Asset Management and 3i. The discussions are said to be amicable so far—but could heat up if unsecured creditors demand a chunk of the equity held by Wasserstein and others.

Together, in the frenzy of the go-go late 1980s, the investors made several key miscalculations. Above all, the notion that British food retailing is a nice stable business throwing off oodles of cash—in other words, an ideal LBO candidate—has proved dead wrong. Britain's longest postwar recession hit even the

food industry. Yet surprisingly, no stores, from discounters to specialty outlets, are now opening up.

Of the investors, Wasserstein has the most at stake, both financially and in terms of reputation. It has taken a beating in the British media and among competitors in the City of London. “They will not be seen as shrewd investors,” says one City buyout rival. But Wasserstein Managing Director Michael Biondi objects. “There has been a bit of an attempt to gang up on the colonials,” he says. “In the U.S., this would just be another deal.”

To shore up Isosceles, investors would have to compromise. Isosceles wants interest charges eased. In return, it would agree to repay some principal early, if it can raise cash through asset sales. Once again, off-again plans to peddle its Herman's Sporting Goods Inc. chain in the U.S. and its F.A. Wellworth & Co. food retailer in Northern Ireland to pay down loans are now back on again.

MONEY WRANGLES. Wellworth, a profitable 33-unit chain, is expected to be taken in public this autumn. The real challenge is Herman's Sporting Goods, acquired in 1986 for \$414 million and doing no more than breaking even before interest and taxes. Two years ago Isosceles turned down an offer for \$30 million, and now several sources who have looked Herman's over say that it will be lucky to get half that amount.

Some equity investors, including Mercury, are beginning to cut the value of their stake in Isosceles on their books. Although Wasserstein, with 40% of the equity, has yet to do so, insiders concede it's inevitable. The only question is: How much? As a yardstick, the small piece of Isosceles equity that is publicly traded is quoted at between 92¢ and \$5.55, a fraction of the \$46.25 that Wasserstein paid for each unit of its investment. Some analysts think Isosceles' equity may be virtually worthless.

Unfortunately for Isosceles, the money wrangles are undermining what some analysts and competitors see as a valiant effort to remake itself. From a mid-market supermarket chain, Isosceles has become something of an innovator, with a new chain of Somerfield fresh-food shops and its Food Giant discount stores. And operating margins have nearly doubled since the buyout, to 6%. “We're piling up profits,” says Isosceles Chairman Ernest H. Sharp, “but they are going into our bankers' pockets.” Still, he believes the prognosis is promising, provided there is “a sense of realism from everybody.” If only that had applied back in the summer of '89.

By Richard A. Melcher in London, with Leah Nathans Spiro in New York



WHY ISRAELI BUSINESS IS SO FED UP

Amiram Sivan, the tough CEO of Bank Hapoalim, Israel's largest and most profitable, has noticed something troubling outside his office window: Right in the heart of Tel Aviv, Russian panhandlers are playing mournful tunes on battered accordions and violins. "Absorbing immigrants has been a total failure," says Sivan.

Indeed, Israel's poor record in creating jobs for newcomers from the former Soviet Union has made the ruling Likud Party's management of the economy an issue in the upcoming June 23 general election. Just a few months ago, the immigrants looked like a boon for Israel. They were expected to boost the labor force and offset the increase of Israel's Arab population. But with unemployment at 12%, nearly half of them have been unable to find work. News of their job prospects have made other migrants delay travel plans. As a result, authorities predict that only 100,000 will come this year—a precipitous drop from last year's 200,000.

MAJOR SPURT. This disappointing performance is one reason Israeli business leaders are becoming more vocal in demanding that the government shift priorities to boost economic growth. One thing they want is to speed the shakeup of the state-dominated economy. Four years after a study by First Boston Corp. identified \$5 billion worth of companies ripe for sell-off, only \$500 million in state holdings has been sold.

Despite its litany of problems, business thinks the economy will grow more rapidly with new policies. Since the Soviet collapse and the Gulf War, export markets are opening up to once-shunned Israel. This year, for example, Koor Industries Ltd., Israel's largest industrial company, set up offices in Beijing to support its growing China trade.

Inflation is slowly dropping, and the startup of peace talks has

begun to attract new foreign investment, such as Intel Corp.'s \$150 million expansion of its semiconductor plant in Jerusalem. The government has also cut defense spending to just 14% of gross domestic product, down from 40% in the mid-1970s. These changes have spurred a 30% rise in the Tel Aviv stock exchange this year.

CHAFING. Although the Likud Party has traditionally been seen as probusiness, most members of the Manufacturers' Assn., including Israel's top industrialists, are backing the Labor Party this campaign. Labor leader Yitzhak Rabin is winning the business vote by pledging to speed up peace talks with the Arabs.

"To get growth, we really do need a peace process," says Dov Frohman, managing director of Intel Israel Inc.

Business executives now chafe at Prime Minister Yitzhak Shamir's channeling of hundreds of millions of dollars into settlements on the West Bank rather than more productive investment. Critics contend that the settlements not only divert funds from Israel proper but also have needlessly strained relations with Washington, depriving Israel of guarantees it requested on \$10 billion in loans. With the guarantees, "we could have gotten loans for expanding industry throughout the country," says Gavriel Oron,

managing director of Gali Industries Ltd., Israel's largest footwear manufacturer. Oron, a lifelong Likud supporter, recently switched to Labor.

Business will continue to push its concerns during the lengthy period of horse-trading on forming a new government that is likely to follow the election. Along with a speedup in privatization, it is also seeking lower corporate taxes and a boost in infrastructure spending. The question is whether whoever wins will have the sense to heed this advice.

By John Rossant, with Neal Sandler, in Jerusalem



**ARAB WORKERS AT A CONSTRUCTION SITE:
DO NEW SETTLEMENTS DRAIN THE ECONOMY?**

GLOBAL WRAPUP

RUSSIA

So strapped is Russia for rubles that one novel plan calls for a limited issue of gold coins. The new coins could be minted in denominations as high as 25,000 rubles—enough to buy an automobile or other big-ticket item, says Vladimir Tsapelik, an economist at the Institute of National Economy in Moscow.

One locality in Siberia is thinking of using the coins to pay the long-overdue wages of coal miners and thus buy labor peace. The coins also could become collector's items.

But gold coins can't possibly solve the problem of Russia's nationwide

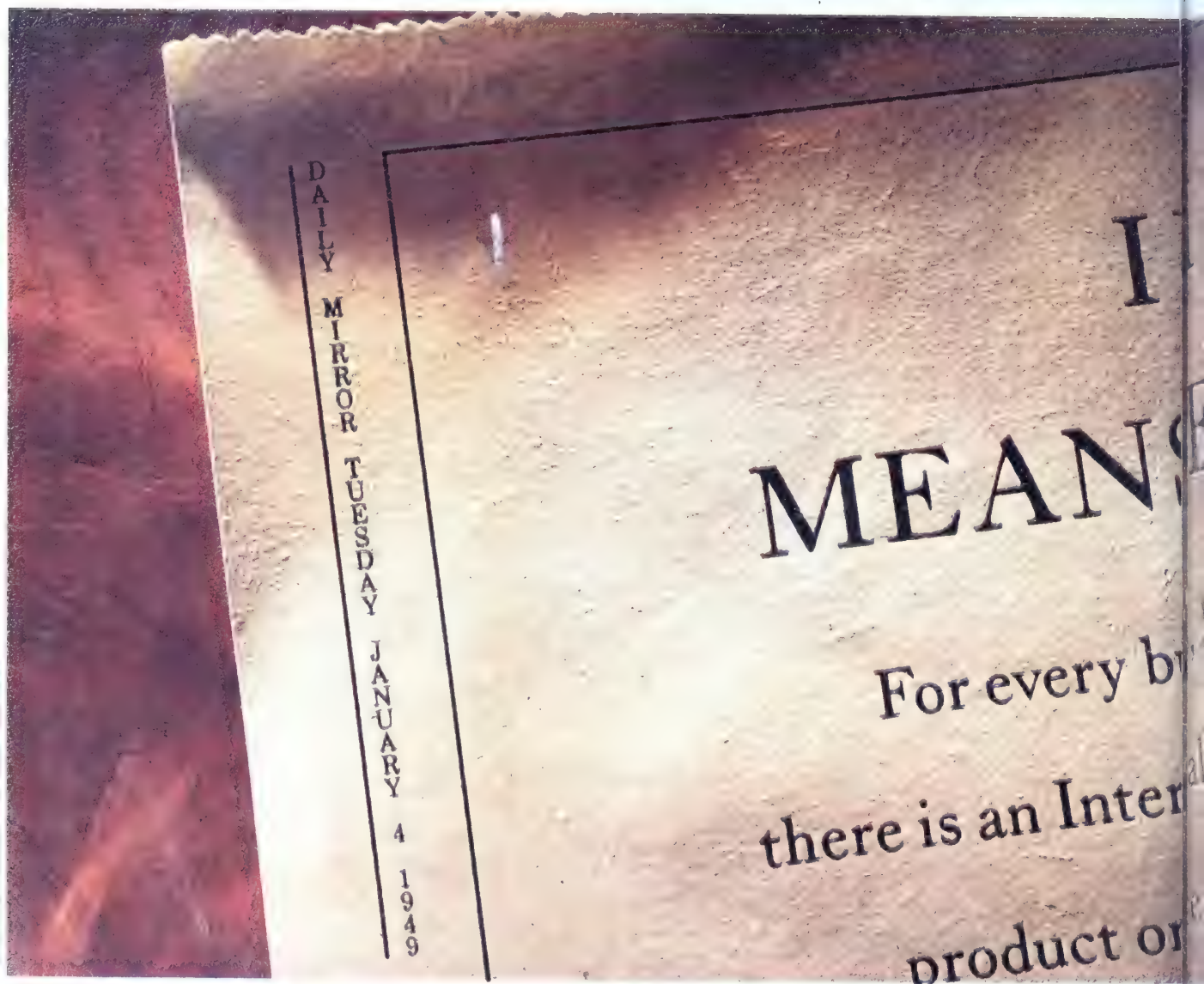
shortage of cash. Gold production in Russia is already falling, and the industry is in turmoil. Not only is there a shortage of skilled workers but several regional gold producers have broken away from Moscow's control and grabbed more resources for themselves.

So the government's gold coffers are already dangerously low. For now, Moscow is keeping the ruble printing presses running, and it is hoping that inflation doesn't soar out of sight. Meanwhile, another locality is considering yet another imaginative idea: minting coins from titanium, which is available in the scrap yards of its defense factories.

THE NETHERLANDS

It seemed as though Jan Timmer, CEO of Philips Electronics, had turned the company around. But suddenly, there is more bad news. Blaming a "deepening crisis" in the global consumer-electronics market, the company says its second-quarter earnings will be well below those of last year. Philips' stock price plunged on the news. Full-year results could also come in below 1991's profits of \$680 million. Timmer is credited with pulling Philips into the black after 1990's \$2.4 billion loss. The gains, however, came almost entirely from cost-cutting. Timmer needs hot new products to keep Philips' recovery from dying.

Our motto.



After all these years, v

Before we were known for computers or Nobel prizes or a blue logo, IBM stood for service. And we still do.

But today the need for service is different. Information technology has become so essential (and so complex), many companies feel it has taken them over. They're looking for someone to lighten the load so they can focus on what matters most, running the business.

So we've refocused, too.

IBM service is now a vast array of services, delivered by experts. Our help can range from broad

ERVICES

, large or small,
al Business Machines
e to help meet the

made one small change.

tic planning, to systems integration, to network
gement and user training.

We can also provide total hardware, software
network availability services, not only by fixing
ms, but by anticipating them before they occur.

If you're streamlining data centers, we won't
ve you a hand, we can take them off your hands.
SSC subsidiary (which specializes in outsourcing
usiness recovery) is now managing several cus-
s' data centers, lock, stock and barrel.

Or, if you're cutting costs selectively, we can
e many functions for you more cheaply than you

can do them in-house, saving you headaches, too.

But it's not just what you save, it's what you
gain. And that's why IBM services exist—to keep your
systems (and the people who use them) at their best
all the time. Technology may be your most critical
investment, and we'll help you make the most of it.

No one else has IBM's kind of depth
or IBM's kind of people, which makes us an ideal
services choice. To learn more about how we can
help you, call for our detailed
services brochure. The number is
1 800 IBM-6676, ext. 760.



RADIO'S EMPIRE BUILDERS ARE SCANNING THE DIAL

New FCC rules will likely let station owners buy more properties

Howard Stern and Don Imus may snarl and sneer on the radio each morning. But it's sweet music to their boss, Mel Karmazin. As president of Infinity Broadcasting Corp., Karmazin owns WXRK-FM and WFAN-AM, the New York stations that feature Stern and Imus. Between them, these acid-tongued disk jockeys attract 20% of New York's morning commuter audience. And that means big profits for Infinity, which recently went public and is the largest U.S. company devoted exclusively to radio stations.

Infinity is likely to become even more dominant. On Aug. 1, the Federal Communications Commission is expected to loosen restrictions on how many stations operators can own. That will allow Infinity and other companies to own a second FM and AM station in each of their markets. Infinity, which owns 18 stations, is already on the prowl for more in cities such as Los Angeles and Philadelphia. "We would like to expand in the biggest markets," says Karmazin.

COMEBACK. He's not alone. The FCC ruling has sent a lightning bolt through what had been a torpid industry. Radio executives are gearing up for a flurry of acquisitions once the new rules go into effect. Most think radio's power players will emerge even stronger, while weaker ones may fade out. "There isn't a single broadcaster in the country who isn't thinking about this ruling," says Doyle Rose, president of the radio division of Emmis Broadcasting Corp. Emmis sold station WFAN to Infinity last April to capitalize on the higher prices stations are already fetching because of the impending change.

Deregulation could also quicken the industry's re-

covery from the media recession. After falling 3% in 1991, radio ad revenue is on the rebound (chart). What's more, radio has clung to its share of ad dollars, while newspapers and broadcast TV have seen some of their revenue go to cable.

Even before the FCC ruling, the indus-

tremendous opportunities for economies of scale," says McCord.

Under existing rules, radio operators own up to 12 AM and 12 FM stations, and more than one AM and one FM station per market. Such caps have limited the growth of even the largest groups: CBS Inc. is the No. 1 operator, with 1991 radio revenues of \$205 million, while Westinghouse Electric Corp. and Capital Cities/ABC Inc. are second and third, with radio revenues of \$200 million and \$199 million respectively.

The FCC wants to raise the ownership limits to 30 FM and 30 AM stations in three of each in major markets. Some lawmakers say the FCC is going too far, and others expect the commission to compromise at 25 and 25, plus two FM and two AM stations per market.

For some radio operators, the new rules will provide desperately needed escape hatch. In addition to the recession, many operators have labored under crushing debt. Following the last wave of FCC deregulation in 1985, radio operators went on an acquisition binge. Emmis and other companies bought up FM and AM stations around the country. When advertising revenue dried up, many of those stations got in trouble. An FCC report says 153 radio stations went off the air in 1991. And leading radio expert James H. Dugan Jr. says half of the nation's more than 9,300 stations are still losing money.

SPREE. Now, many of those troubled companies will be able to get out of radio by selling to strong players such as Infinity or Cap Cities. Emmis, for example, got \$70 million for WFAN, or seven to eight times projected 1992 cash flow, according to analyst John S. Reidy of Smith Barney Harcourt Upham Inc. That's cheaper than what stations sold for at the peak of the buying spree, but more than Emmis would have gotten if Infinity had been unable to bid.

And it's a good deal for both companies: Infinity will be able to boost its revenue by selling WXRK's Stern and WFAN's Imus to advertisers as a package. And debt-burdened Emmis got a good price. "It's a good thing for the entire industry," says Washington radio broker Jim Blackburn. Not everybody agrees.

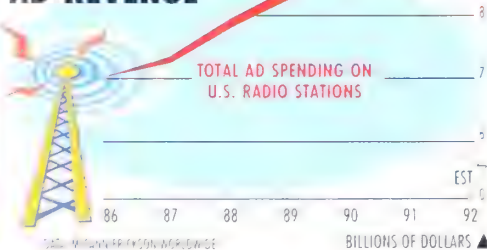


McCord and KKR are in the mood to buy—but it's a seller's market

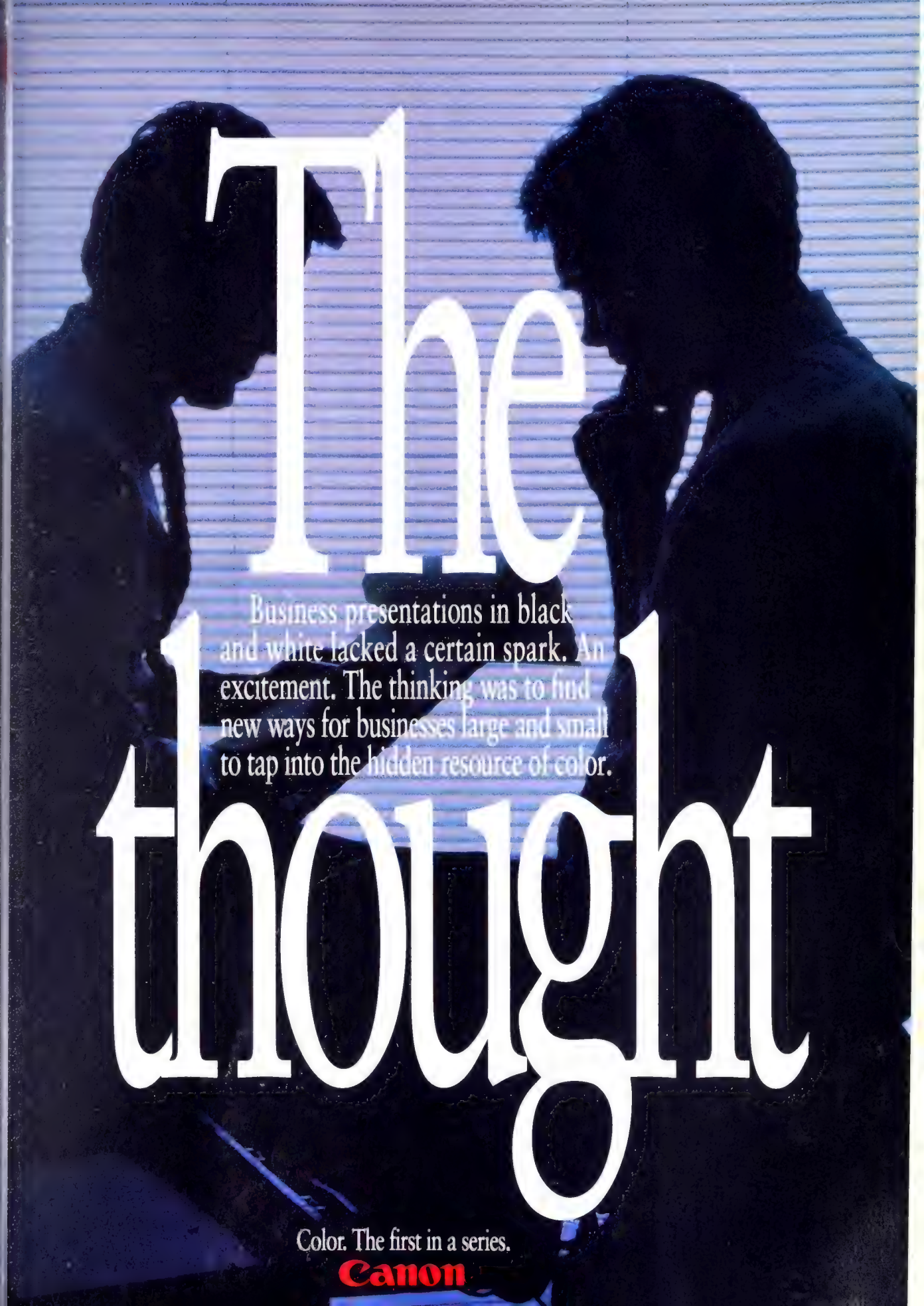
try's rosier prospects were attracting new investors: Leveraged buyout firm Kohlberg Kravis Roberts & Co. began buying stations last year in a venture with radio entrepreneur Herbert McCord. But experts agree that consolidation is the key to restoring the industry's profits: "There are

lion for WFAN, or seven to eight times projected 1992 cash flow, according to analyst John S. Reidy of Smith Barney Harcourt Upham Inc. That's cheaper than what stations sold for at the peak of the buying spree, but more than Emmis would have gotten if Infinity had been unable to bid.

THE CLIMB IN AD REVENUE



Stern: Acid-tongued

The background of the advertisement features the dark silhouettes of two individuals, likely in a business meeting, positioned on either side of the central text. They are set against a backdrop of horizontal blinds, which are partially open, allowing a soft, blue-tinted light to filter through. The overall mood is professional and contemplative.

The

Business presentations in black and white lacked a certain spark. An excitement. The thinking was to find new ways for businesses large and small to tap into the hidden resource of color.

thought

Color. The first in a series.

Canon

The execution was brilliant

It started with a thought. A vision. And evolved into a corporate commitment to develop and refine technologies which would bring color into the world of business. A commitment which recognized the importance of color business communications. The result. Products that lead the way in color office automation.

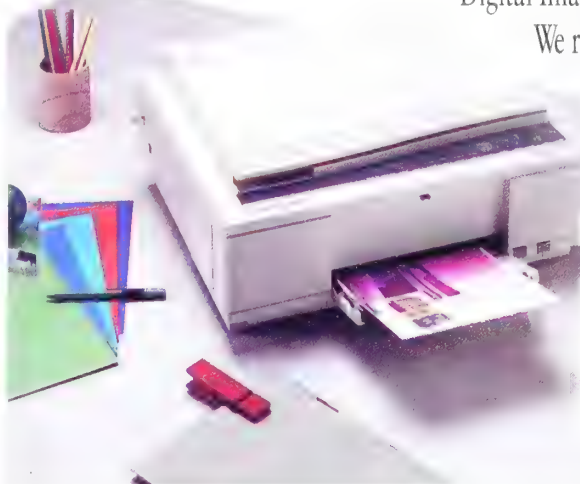
For decades, Canon has recognized the importance of color to business communications, and has been dedicated to making new color technologies available to businesses of all sizes. Technologies that helped create products like our first analog color copiers and our latest state-of-the-art digital, Laser, and Bubble-Jet color copiers and color printers. All of which were designed to help your business be more competitive by giving you the flexibility to create and present in color.

Yet before our thoughts on color could become a reality, there

development. Years of perfecting our leading NP black and white copying technology, the color copying application Laser Beam, as well as Bubble-Jet printing, and color digital technology. All of which led to the development of our Color Digital Image Processing System (Color-DIPS).

Digital Image Processing System (Color-DIPS).

We realized if businesses were going to reproduce their color presentations and communications, they had to give them the ability to



The Canon C110 Color Bubble-Jet Copier. With a computer connecting option, our newest thought has the flexibility to be a color scanner and color printer. That's why we think the C110 is the most powerful, affordable desktop full-color system you can find.

reproduce high-quality, legitimate black text directly from black toner, as well as virtually photographic quality color graphics. So, for the first time with Color-DIPS, true four-color copying was available to provide crisper text, richer half-tone reproduction and superior overall copying and printing. And because of this digital process, many of our machines have the ability to manipulate images to interface with just about any electronic or computer source.

Of course, it was our expertise in Laser Beam printing that allowed our products to reproduce the highest quality graphics and text. The quality your business can get with Canon's Color Laser Copier 500 and Color Laser Copier 300. These two machines have single-handedly set the standard for color output. This is because the Canon Color Laser Copiers have given businesses both unmatched color reproduction and flexibility.

With the invention of our patented Bubble-Jet printing process, laser quality text and graphics became affordable to



were many years of research and

The Canon Color Bubble-Jet Copier A1. The definitive large format color copier. It makes multi-page display size copies of 22 by 33 feet from oversized originals up to 22 by 33 inches, or even your computer with a connectivity option.





 The Canon Color Laser Copier 500 is our premiere digital color copier that has set the industry standard for quality, productivity and flexible features unmatched by any other color copier. The Color Laser Copier 300 provides high-quality Canon reproduction for the most impactful business solutions. Both have connectivity options to give you the flexibility to import images from just about any electronic or computer source.

esses of any size. For the first time, you could get o-maintain, affordable copiers and printers that provided resolution and compact size.

's Bubble-Jet technology that's in our newest thought, the native Canon CJ10 Color Bubble-Jet Copier. It merges Color-DIPS technology with our Bubble-Jet printing process to give you a desktop color business system at a price that just about any business can afford.

Bubble-Jet technology is also at the heart of two very different machines from Canon. To make



 The Canon Color Bubble-Jet Printers BJC-800 and BJC-820. An affordable way to allow you to make the color images on your computer screen a colorful reality on paper.

color presentations on your computer screen a reality on paper, there are the Canon Bubble-Jet printers BJC-800 and BJC-820. They're also the perfect choices since they're easy to maintain, and are extremely quiet and affordable.

For large format copying there's the Canon Color Bubble-Jet Copier A1. From oversized originals up to 22 inches by 33 inches, it makes letter-sized copies, and even wall-sized displays, up to 22 feet by 33 feet in size with consistent clarity.

All of these products came from the same vision. To make products that would change the way businesses conduct business. Products that help businesses be more productive. Products that help businesses succeed. Products that provide unsurpassed color reproduction. We call these the products of enlightened thinking. After trying a Canon color business product, you'll simply call them brilliant. For more information call 1-800-OK-CANON. (For printers, 1-800-848-4123.)

Canon

Consumer advocates and opponents in Congress argue that the looser regulations will concentrate too many stations in the hands of a few robust operators. What's more, consolidation could squeeze out minority broadcasters, some of whom are saddled with onerous debt loads. "It's not clear that allowing this much concentration will benefit the public," says Gene Kimmelman, legislative director of the Consumer Federation of America.

Radio executives insist the industry is so diffuse that even lots of consolidation won't harm diversity. Still, the industry is anxious not to offend. The National Association of Broadcasters recently asked FCC Chairman Alfred C. Sikes to tone down his proposal. And Commissioner James H. Quello says the FCC is likely to compromise, if only to mollify Representative John D. Dingell (D-Mich.), who blasted the current proposal.

SHREWD DEALS. Most execs don't have grandiose visions of radio empires in any event. They just want the chance to buy a second FM or AM station. By doubling up, they say, they can offer attractive advertising packages. Owning two stations would also allow operators to dominate certain demographic groups, says James P. Arcara, president of ABC's radio group. In San Francisco, for example, ABC owns an all-news station, KGO-AM. If ABC were able to buy CBS' talk-radio station, KCBS-AM, the company could dominate the 25-to-54-year-old age group and raise its ad rates.

But that's a big if: Major market stations are generally far more profitable than small ones. So few companies will rush to sell. More likely, ABC and others will swap stations so that each would end up with a pair of stations in individual markets.

In smaller markets, aggressive radio operators are also lining up deals. Evergreen Media Corp., which owns WAFB-FM in Jacksonville, Fla., recently bought the rights to program a rival Jacksonville FM station. Evergreen plans to buy it outright after the rules change. By owning two stations, Evergreen Chairman Scott Ginsburg says he will dominate the 18-to-49-year-old age group in that market.

The changes may hurt radio's newest investors the most. KKR has made some shrewd deals by buying distressed stations at low prices. But now it will be competing with every other top radio group. "We'd love to be in all of the top 10 markets," says McCord, "but that's not practical." KKR tried to buy Westinghouse's 18 stations for about \$500 million last year. McCord concedes he would probably have to buy a large radio group outright to become a major player.

To succeed in this new era of Radio, it helps to have a loud voice. McCord and others must figure out how not to get lost in the din.

By Mark Landler in New York, with

People

MOGULS

DAVID GEFFEN TRIES OUT A NEW AC

He made \$1 billion producing records. But can he go mainstream?

"THERE'S NO ONE THAT HE CAN'T GET ON THE PHONE": GEFFEN'S ROLLODEX IS LEGENDARY

It's less an office than a room built for schmoozing. No desk. An L-shaped sofa. Two sleek telephones. And a wedge of warm, Southern California sunshine streaming through the window. Outside, miniskirted women and ponytailed men scurry down halls hung with posters advertising the rock groups Guns N' Roses and Nirvana. But inside, the bustle is replaced by the steady cadence of David Geffen's voice.

If he were alone, Geffen would be making phone calls. Lots of them. Whether he's sitting in his office, riding in the back of his chauffeured Lincoln, or flying to New York in his new Gulfstream IV jet, it's a rare moment that he doesn't have a phone pressed to his ear. Contacts are Geffen's stock in trade: Working them better than anybody else made him the world's largest independent record producer. A knack for dealmaking, buckets of energy, a legendary toughness—all have been cru-

cial to Geffen's heady success. But the reason David Geffen emerged last year as the richest man in Hollywood is his uncanny ability to discover raw talent, feed it through his Rolodex, and parlay it into rivers of money.

RELENTLESS. Lately, though, Geffen has spent more time chatting with investment bankers than rock stars or club owners. And today, he's explaining how David Geffen the Hollywood record producer would like to cross over to become David Geffen the hotshot businessman. Since 1990, when the former made \$710 million by selling his booming Geffen Records, the latter has been itching to emerge. Geffen has done Hollywood. Now, as he approaches his 50th birthday, he's looking for a different way to channel the relentless ambition that drove him from a row house in Brooklyn to this Sunset Boulevard nonoffice.

"It's not the money," he insists. "At least, not anymore. 'I couldn't possi-



JUST A BOY FROM BROOKLYN

1943

Batya Volovskaya Geffen gives birth to son David in Brooklyn. Business is a big part of boyhood as he watches Mom run her custom bra shop: Chic Corsetry by Geffen

1960

Geffen enrolls at the University of Texas but drops out during his freshman year

1964

Lands a mailroom job at the William Morris talent agency where he meets future Fox chief Barry Diller

1966

Signs folksinger Laura Nyro as his first act. Together, they form Tuna Fish Music, which they sell to CBS in 1969 for \$4.5 million. Geffen gets half

1970

Launches Asylum Records. Client list: Linda Ronstadt, Joni Mitchell, Jackson Browne, the Eagles. Sells it to Warner Communications for \$7 million in 1972

1975

Warner Chairman Steve Ross makes Geffen vice-chairman of Warner's movie studio. Geffen leaves months later by mutual consent. Diagnosed with bladder cancer in 1976, he drops out of the business world to teach courses on the music and movie businesses at Yale and UCLA

1980

Cancer scare proves a false alarm, and Geffen launches Geffen Records, bankrolled by Ross. After some slow years, the label scores in the late '80s by discovering superband Guns N' Roses, among others

1990

Geffen accepts offer from MCA to buy Geffen Records for \$545 million in MCA stock. Eight months later, MCA sells out to Japan's Matsushita for \$6.1 billion, turning Geffen's shares into \$710 million in cash

1991

As speculation builds about Geffen's intentions, he teams with Richard Rainwater in a failed \$3 billion bid for bankrupt insurer First Executive Corp.

1992

Geffen buys \$62 million worth of friend Calvin Klein's junk debt. But Hollywood waits for the big move. Possible partners in an acquisition: friends Barry Diller and Jeffrey Katzenberg

DATA: BW

end more money than I already have." What Geffen wants is to take that money—\$1 billion at last count—into the world mainstream dealmaking. He dreams of coming chief executive of a major company. "I don't know what's left for David in the record industry," says Geffen's friend Allen Grubman, a New York entertainment lawyer. "His dilemma is: What's to do with the rest of his life."

Most Geffen watchers—and they sound—expect him to team up with a friend such as ex-Fox Inc. Chairman Barry Diller or Walt Disney Studios chief Jeffrey Katzenberg to go after one of the TV networks or an entertainment giant such as Paramount Communications Inc. But his biggest foray so far has been a far cry from the entertainment industry. Last September, he joined with Fort Worth financier Richard Rainwater and the Bechtel family to make an unsuccessful \$3 billion bid for failed insurance company First

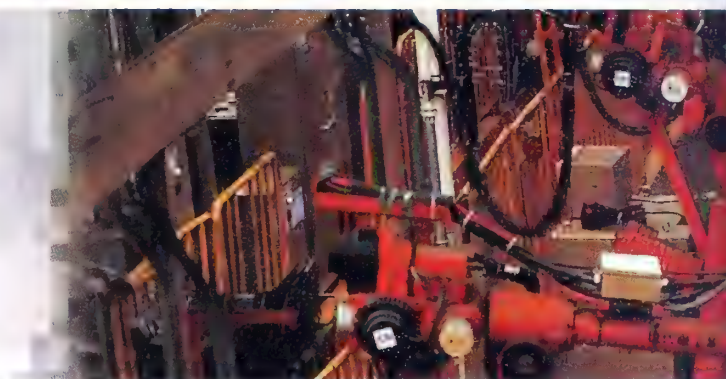
Executive Corp. and its portfolio of junk bonds. "David Geffen isn't just some Hollywood guy," says Leon Black, a former Drexel, Burnham Lambert Inc. investment banker, whose group won the bidding for First Executive. "He's a very shrewd investor who knows value when he sees it."

DAY-OLD GROWTH. The record so far is hard to dispute. In early 1990, eight months after he sold Geffen Records to MCA Inc. for \$545 million in stock, Japan's Matsushita Electric Industrial Co. acquired MCA, turning Geffen's 12.5% stake into a \$710 million windfall. Add in assets ranging from a rich portfolio of real estate to interests in Broadway hits such as *Cats*, and Geffen's net worth climbed past \$1 billion after the deal.

The question is whether the fiercely independent entrepreneur can successfully manage anything other than his own record label. His only attempt so far was a disastrous stint as vice-chairman of Warner

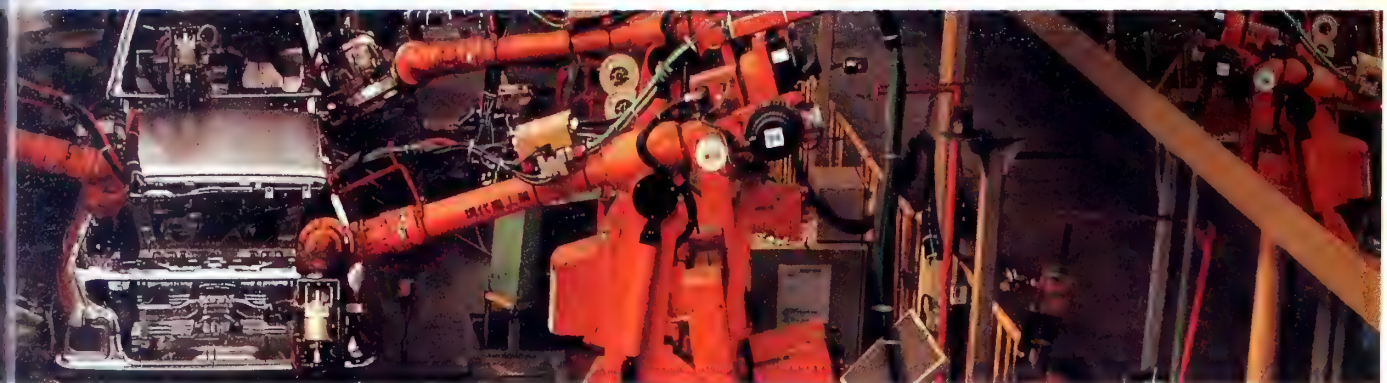
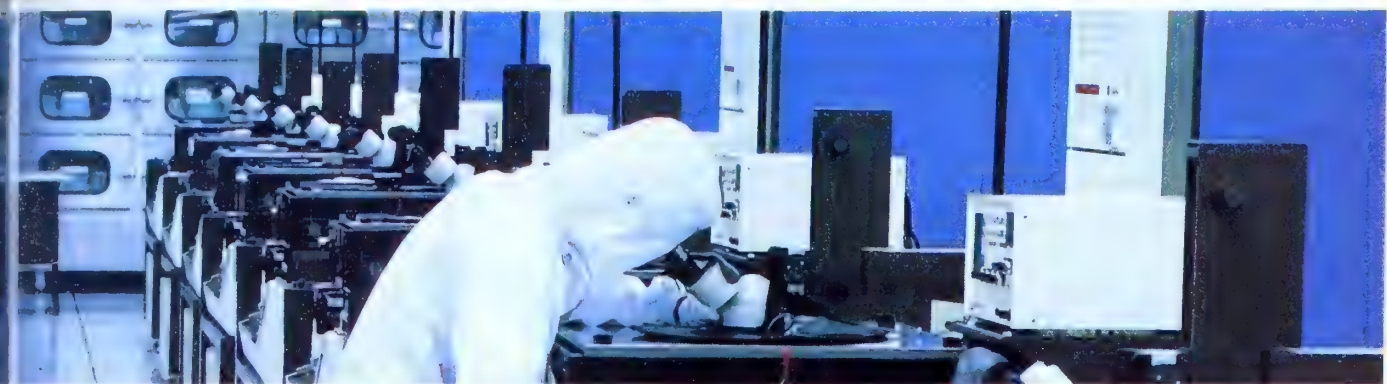
Bros. Pictures in 1975. That failed when Geffen couldn't adjust to the constraints of corporate bureaucracy, forcing his departure in less than a year. When Geffen sold out to MCA, he says he harbored hopes that MCA's 79-year-old chairman, Lew Wasserman, would eventually step down and let him run the show. But he also admits that "I don't operate well under majority rule. I have to be the one who is responsible."

He's certainly making no attempt to recast himself in the corporate mold. You can start with his attire. Geffen is definitely a clotheshorse, but a coat and tie aren't part of the uniform. Khakis or jeans, Italian loafers, and casual shirts are his mainstays, complementing his stylish, close-cropped hair and his penchant for a day-old beard. When Geffen showed up at Sotheby's Inc. in New York last November to drop \$3.4 million on Willem de Kooning's painting *Woman*, he was sporting



Hyundai: Your Global

Hyundai has grown into one of the largest and most innovative industrial business groups in the world. We design and manufacture cars, ships and machinery, industrial plants and petrochemicals, robots, computers and telecommunications systems.



Business Partner.

Hyundai is involved in over 30 different business areas.
If you are looking for a strong partner who
can turn your business venture into a great success,
meet with us at Hyundai.
Together we can build the future.

HYUNDAI

K P.O. Box 92 Seoul, Korea Tel. (02) 746-1873
Tlx: K23175/7 Fax: (02) 741-2341

slacks, a loose-fitting shirt, and a white painter's cap worn backwards. He likes to work at home. He hates details. And when he does go to the office, he arrives closer to 11 a.m. than to 9, so he can work out with weights. "David does things his own way," says Grubman. "His style doesn't fit the corporate structure."

It's all part of Geffen's business-by-immersion approach. Much of his success in music stems from his ability to live the Hollywood life, feel its rhythms, and mine it for all it's worth. Rock musicians feel they can trust him—so they stay with him and recommend their friends. And once Geffen has an act, he'll use his extensive business contacts to help it blossom. "He has one of the best Rolodexes in town," says super-agent Michael Ovitz, himself one of the industry's most ubiquitous schmoozers. "There's no one that he can't get on the phone."

FREQUENT CALLER. The phone is Geffen's lifeline, the focus of his day. He says he has spoken with Disney's Katzenberg every day of the week for the past 15 years. They've never done business together, but the information they trade is worth its weight in gold. "I try to get his observations on what's valuable to me," Katzenberg says. And vice versa. Geffen has even had a special satellite phone installed in his plane so he can keep in touch across oceans, where regular cellular phones fail. The price tag: \$600,000.

Geffen's life has been the sum of his contacts ever since he made his first \$1 million in 1969. That was three years after he signed his first big act, folksinger Laura Nyro. When Geffen met Nyro in 1966, her songs were well-received, but her career was foundering because of an awkward stage presence. Geffen moved in with her, formed a company called Tuna Fish Music to hold her copyrights, and then worked the phones. He got her songs placed with stars such as Barbra Streisand and the Fifth Dimension, dramatically increasing their value. By 1969, he arranged to sell Tuna Fish to CBS Inc. for \$4.5 million, collecting half of that for himself.

A year later, 27-year-old Geffen started his own label, Asylum Records, and began to make his mark. Success again was an example of networking, Bohemia-style. One of Asylum's early stars was folksinger Joni Mitchell, whom Geffen discovered

on a demo tape sent in by another singer, Buffy Sainte-Marie. His success with Mitchell led Jackson Browne to send in a tape. And when Geffen went to Browne's house to sign him, he heard about a group called the Eagles living upstairs. All became Geffen superstars, while others, such as Tom Waits, merely did well. Geffen discovered Waits while standing in line to use the bathroom in a Los Angeles club.



"HIS STYLE OF WORKING DOESN'T FIT THE CORPORATE STRUCTURE": SCHMOOZING (FROM ABOVE) WITH DIANA ROSS IN 1979, CHER IN 1974, AND KELLY AND CALVIN KLEIN IN 1991



While Asylum became Geffen's second major deal—he sold it to Warner Communications in 1972 for \$7 million—his biggest score came from Geffen Records. This time, the key relationship was with Warner Communications Inc. Chairman Steven J. Ross. In 1980, Geffen persuaded Ross to help him launch a new label by providing financial help and a distribution contract. Eventually, however, the company's equity reverted to Geffen. Over the next decade, the label grew into the nation's largest independent by finding such

superstars as heavy metal sensation Guns N' Roses and rebound rockers such as Cher and Aerosmith. By the time a wave of consolidation swept the industry in the late 1980s, Geffen was in a perfect position to make a killing.

Part of Geffen Records' success stemmed from the chief's decision to hire a team of smart young executives to spot new talent—Geffen was tired of trying to judge teenage tastes. Meantime, he focused on larger issues such as doing deals and chasing established stars. In 1990 that led to a now-infamous face-off with his biggest rival in the industry—Walter R. Yetnikoff, then the fiery president of CBS Records Inc.

DIVIDENDS. The issue was Michael Jackson, whose contract was held by CBS (now Sony Records). Although Geffen denies it, sources say he wanted Jackson for his own label. When Jackson's pact came up for renegotiation, Geffen persuaded the star to fire his team of business advisers

and replace them with Geffen's people. As it turned out, Jackson couldn't switch labels because of a contract technicality. But the move paid other dividends: MCA, which had already bought out Geffen that year, got management rights to certain Beatles songs that Jackson owned. Moreover, industry sources say the lengthy battle between Jackson and Yetnikoff—Geffen's enemy— hastened Yetnikoff's departure from CBS later that year. The incident bur-

nished Geffen's reputation for ferociousness when it comes to chasing talent and targeting those he doesn't like. "Business is rough, and David is good at business," says Diller. "Draw your own conclusions."

It's easy to conclude that Geffen won't stand still for long, not with all that money in his pocket. Though he has almost three years to go on his contract to run Geffen Records for MCA, he spends lots of time managing his \$750 million personal bond portfolio and burning up the phone lines hunting for the right deal to spend it on. The way Geffen sees it, finding undervalued assets and spinning them into winners isn't so different from sniffing out underappreciated rock groups and turning them into superstars. "I'm an excellent problem solver," he says. He's proved that many times. But even for David Geffen, knowing who to call in Hollywood is no guarantee of success anywhere else.

By Ronald Groer in Los Angeles

AFTER PUTTING EACH OF OUR HOTELS THROUGH 900 DIFFERENT TESTS THERE'S ONE MORE THING WE DEMAND OF THEM.

It's not easy to become a Preferred Hotel.

To be accepted for membership a hotel must submit to one of the most exhaustive and demanding examinations imaginable.

If they pass these tests (90% do not), there's one last condition they must meet: They must welcome the American Express® Card.

You see, the American Express Card is accepted everywhere Preferred Hotels® are located. And there are



more than 1700 American Express travel locations* worldwide to help guests with travel plans. Plus, only the American Express Card offers Global Assistsm for worldwide emergency medical and legal referrals.

There are over 300,000 hotels and resorts



in the world. At present, only 105 are Preferred. And every one of them proudly welcomes the American Express Card.

For a free directory of all 105 Preferred Hotels and Resorts Worldwide, call 1-800-237-7254.

Or call your travel agent and ask if there's a Preferred Hotel where you're planning to visit. And be sure to ask for an American Express® Card Assured Reservation** when you call.

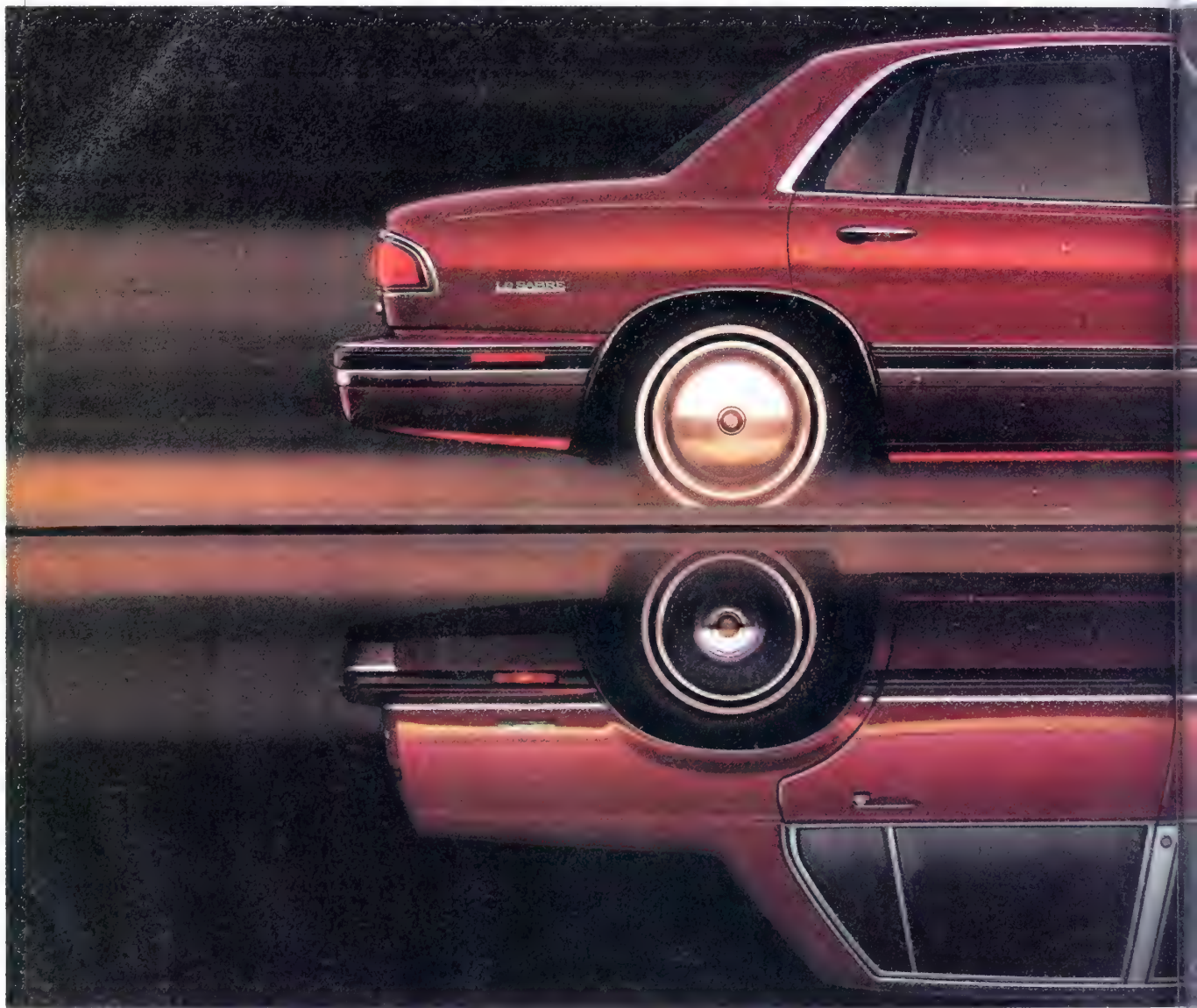
Cards

*Travel Service locations of American Express Travel Related Services Company, Inc., its affiliates and Representatives.

**Be sure to ask about restrictions and cancellation requirements when you call.

©1992 Preferred Hotels® & Resorts Worldwide. All rights reserved.

The 1992 Buick LeSabre To make a legend.



All New, All Buick

Buick LeSabre—a car whose reputation for quality is legendary—has been totally redesigned. Here's how we are making it even better.

Safer

The new LeSabre offers a standard driver

air bag, front-wheel-drive traction and available anti-lock brakes.

More Powerful

With tuned-port injection for 1992, the 3800 V6 engine is rated at 170 horsepower. And a 4-speed automatic transmission with computerized shift control provides

that power with smooth precision.

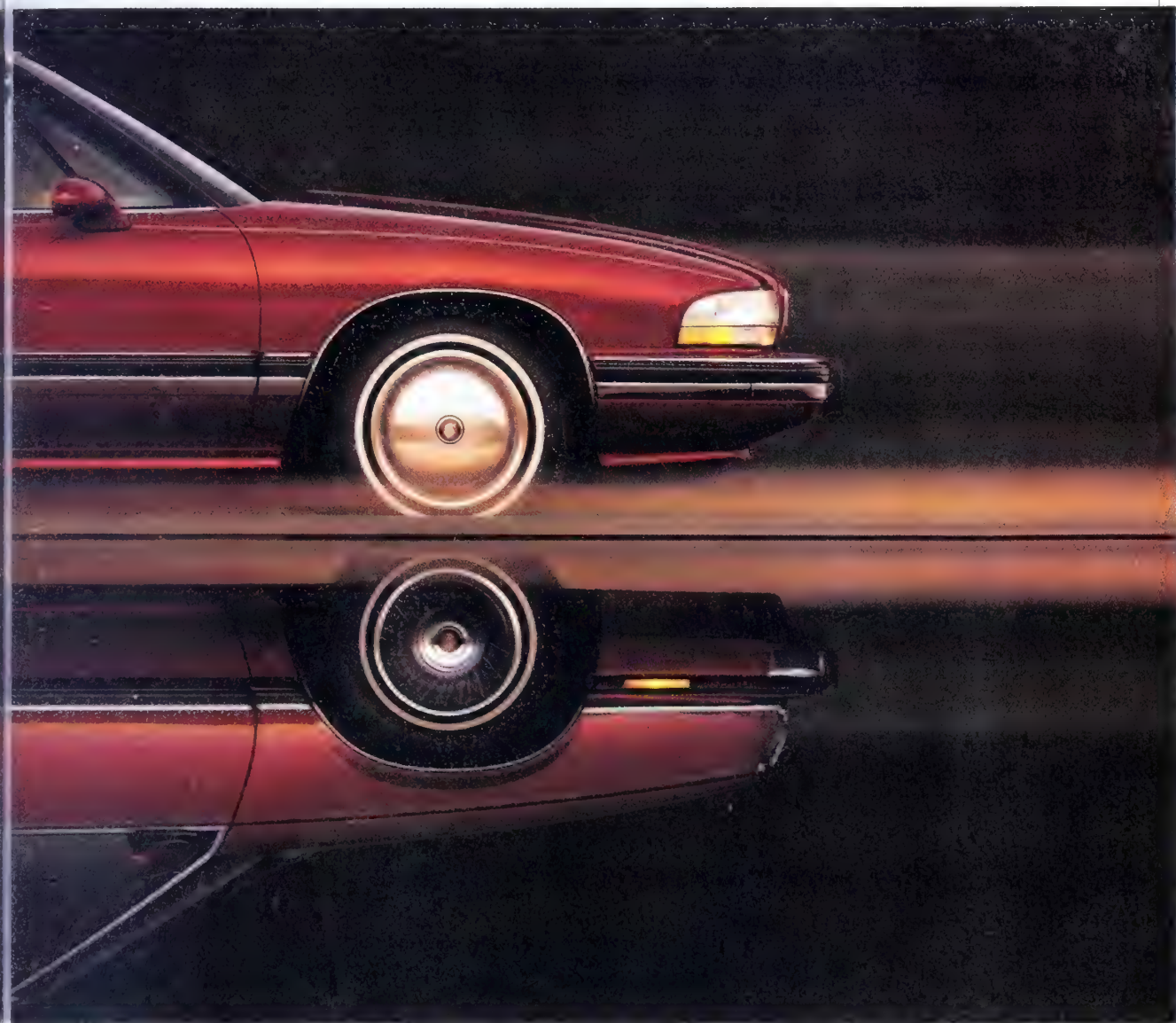
DynaRide Smoothness

LeSabre's DynaRide® suspension senses the road and responds, to create a remarkably smooth, library-quiet ride.

Roomier

LeSabre offers 6-passenger seating, plus

LeSabre.
better...



...we reflect



generous head- and legroom, and a 17-cubic-foot trunk with an easy-access low-liftover design.

Fuel Economy

The full-size LeSabre delivers fuel economy that

some mid-size sedans can't even match.

EPA ESTIMATED MPG	
18/city	28/highway



To learn more about the 1992 LeSabre, please call 1-800-531-1115. Or better yet, see your Buick dealer.

BUICK

The New Symbol For Quality In America.

©1991 GM Corp. All rights reserved.
LeSabre is a registered trademark of GM Corp.
Buckle up, America!



WHEN OVER 75,000 LIVES
ARE ON THE LINE

WHO DO YOU WANT
STANDING BEHIND YOUR
PHONE SYSTEM?



When life or death is just a breath – or a phone call – away, you don't pick an ordinary phone system.

You pick one that's based on the simple design premise that *all calls can get through!*

But Fujitsu's non-blocking architecture wasn't the only reason that New England's newest medical center – the \$218-million Dartmouth Hitchcock Medical Center (DHMC) – selected their F9600 digital PBX to take it into the 21st century. DHMC also wanted a system that was compatible with their existing phones. A system that transmitted voice, data, fax and video images to 4,700 terminals over a seven-mile network of fiber optic cable.

And a support team committed to Integrated Services Digital Network (ISDN) applications.

The answer was Fujitsu, a \$21-billion global telecommunications and computer leader serving over 100 countries.

To see what answers the F9600 has for you, call 1-800-553-3263.



The F9600 Digital Telephone from Fujitsu, a \$21-billion global telecommunications leader serving over 100 countries

FUJITSU

Computers, Communications, Microelectronics



THE WAR OF THE PILL

stake is a vast market—women on the verge of menopause

When Nancy Rosenblum's doctor suggested she go back on the Pill, the 47-year-old San Francisco artist hesitated. She had been on the Pill since the 1970s, when health care drove many women to other methods of birth control. But then she changed her mind. "I hated the diagram," says Rosenblum. The Pill could deliver peace of mind, she figured, and smooth the way to menopause. Rosenblum is the kind of customer loved by makers of the Pill, which is riding a midlife crisis of its own. Demographic changes are eroding its prime market of twentysomething women, while sterilization is increasingly popular. Marketers earn their fat 30% profit margins on drugstore prescriptions, which account for more than 60% of the \$1 billion-a-year market. And drugstore prescriptions for the Pill last year slipped 4.9%, to 50.8 million, according to prescription-tracking service Walsh America-PDS. With their profits imperiled, a war is heating up between rival Pill companies.

Small players are grabbing share from the giants, big players are suing one another, and salespeople are pounding on doctors' doors. "The pressure is intense," says Dr. Leon Speroff, professor of obstetrics and gynecology at Oregon Health Sciences University and an adviser to Parke-Davis, Warner-Lambert Co.'s drug division. "These people are coming around all the time."

Drugmakers never discuss their costs, but it's clear that in this fight they're heavy. One big expense is product development, which involves almost all the marketers. When Johnson & Johnson's Ortho Pharmaceutical Corp. tried to roll

out Ortho-Cyclen, a new Pill with reduced side effects, it was stopped until 1994 by a successful patent-infringement lawsuit from the Wyeth-Ayerst Laboratories Div. of American Home Products Corp. Court papers detail how Ortho spent \$50 million developing Ortho-Cyclen, budgeted an additional \$10 million for marketing, and planned to give away 25 million pills.

Wyeth is another big spender. Last year, when it rolled out Norplant—six phased-release capsules implanted in a woman's arm—it trained 25,000 doctors in the procedure and sent 50,000 more physicians free teach-yourself kits, complete with videos and simulated arms. Norplant's edge is convenience, and it's enough: After 16 months on the market, it has rolled up \$120 million in sales.

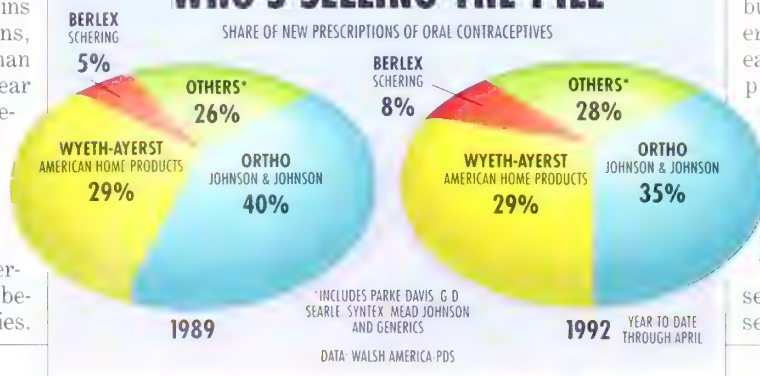
NEW PROSPECTS. Since only about 14% of Pill users are over 35, Ortho, Wyeth, and many smaller marketers are also targeting older women. "You have to convince the women over 35 to take the Pill to keep the market in a growth pattern," says John Marino, Parke-Davis' associate product manager of female health care. Until 1990, that was an unworkable strategy, since the Food & Drug Administration, citing heart disease risks associated with the Pill's estrogen content, discouraged women over 40 from taking it. With the advent of lower-estrogen versions, the FDA reversed its decision for nonsmokers.

Now marketers freely peddle the Pill to women in "perimenopause," the decade preceding menopause. Researchers recently defined this phase as being marked by greater menstrual irregularity and a decline in certain hormones. The concept is a boon for marketers, since the Pill insures menstrual regularity—a plus for women in their 40s who might worry that a skipped period signals an unwanted pregnancy. Parke-Davis, for example, runs ads for its Loestrin 1/20 as a Pill for the "contraceptive needs of the perimenopausal woman."

In fact, marketers increasingly stress side benefits. In literature distributed to doctors' waiting rooms, Wyeth lists 10 of the Pill's attributes uncovered by researchers, including lighter periods, easing of cramps, and some protection against ovarian and endometrial cancer and pelvic inflammation. Researchers also contend that the Pill lowers the risk of cardiovascular disease and slows age-related bone loss. In March, researchers at an Ortho-funded seminar talked up the Pill's

WHO'S SELLING THE PILL

SHARE OF NEW PRESCRIPTIONS OF ORAL CONTRACEPTIVES



Now, Dr. Saunders Goes To Work Every Day On Venus.

And he's just begun to scratch the surface.

Since August 1990, Steve Saunders and his associates at NASA's Jet Propulsion Laboratory have been analyzing the pictures coming in from the Magellan spacecraft, built by Martin Marietta.

Magellan has been providing remarkable images based upon its ability to see through the clouded atmosphere of Venus. Those images reveal a world of volcanoes, lava flows and faults geologically similar to Earth. In fact, the volcanic activity on Venus is so well preserved, that it may help us to better understand the process of volcanoes here on our own planet.

Venus may also be a window into our past, when the Earth was very young. It puts us one step closer to understanding how "twin" planets, so similar in size and location, could evolve so differently. What caused the atmosphere of Venus to change into an out-of-control "greenhouse effect"? What does it mean to our own future here on Earth?

Steve Saunders and the people at JPL are working hard to bring Venus down to Earth. At Martin Marietta, we're proud that we can help them along the way.

To us, mission success is the only bottom line.

MARTIN MARIETTA

6801 ROCKLEDGE DRIVE, BETHESDA, MARYLAND 20817





health-preserving powers. The Pill's champions insist such benefits offset long-standing concern about a higher risk of breast cancer among longtime Pill users. The FDA allows these health-related claims but still mandates that cancer risks be cited in all labeling.

All these efforts have yielded gains. Ortho says Pill use among women between 40 and 44 has doubled since 1990, to 700,000, although that's only 8% of all users. Overall, the Pill is still used more often than condoms or diaphragms. A survey by Ortho says 28% of all women between the ages of 15 and 50 chose the Pill in 1991, up from 24% in 1988. But that figure includes oral contraceptives dispensed at low-cost, non-pharmacy outlets, such as Planned Parenthood clinics.

'PRESSURE.' The competition has taken a toll on top-ranked Ortho. With total sales of about \$400 million, the J&J division has seen its share of new prescriptions drop from 40% in 1989 to about 35% (chart, page 71). "We have felt some pressure," admits Brandon L. Clark, Ortho's product management director.

The Wyeth-Ayerst suit has cost Ortho up to \$200 million in additional sales. But little players have done their part. A low-price strategy pursued by Berlex Laboratories Inc., a unit of Germany's Schering, has boosted its market share. Parke-Davis has gone from 4% in 1989 to 6% now, thanks to its shrewd peddling of its ultra-low-estrogen Pill as suitable for older women. And with its sales force outgunned more than 3-1 by Ortho and Wyeth, Parke-Davis gained an edge in credibility by using a sales staff mostly made up of trained OB-GYN nurses.

Ortho is hardly giving up. Besides pouring funds into promising research, such as injectable hormones and long-acting contraceptive vaccines, it is still fighting the court order blocking Ortho-Cyclen. And it has teamed up with Organon Inc., an American unit of Dutch drugmaker Akzo Pharma, to seek U.S. approval for another new Pill, which now dominates the European market.

With new prescriptions dropping off, it's clear marketers have a way to go before they fully reinvigorate their product. And some executives sense marketing can only do so much. "To get the market going again, you're going to need some breakthroughs on the research side," says Paul E. Freiman, chief executive of Syntex Corp., another maker of the Pill. Such breakthroughs are probably years away. And even then, few innovations are likely to prove as revolutionary as the Pill itself once was. But Pill makers aren't asking for a youthful revolution—just a nice stretch of prosperous middle age.

By Joseph Weber in Philadelphia, with Alice Cuneo in San Francisco

Information Processing

SUPERCOMPUTERS

CALL IT SUPERBIG BLUE

IBM is redoubling efforts in cutting-edge, ultrapowerful machines

Since 1986, the story of IBM has been one of contracting earnings, massive write-offs, and disappointing turnaround plans. But there's another story that has been overlooked. During the same period, IBM has scored a success that's potentially crucial to its long-term survival: Quietly, it has become a major force in supercomputing. Even though it still doesn't sell what market leader Cray Research Inc. would call a supercomputer, Big Blue has assembled the broadest array of technical

enormous data bases. A strong base supercomputing helps IBM identify such cutting-edge commercial customers. More important, it alerts the company to the new capabilities that, in a few years, mainframe customers will demand.

Right now, by most measures, IBM holds a strong hand in high-performance computing. Its largest mainframes, for instance, do certain kinds of arithmetic at record speed. IBM also sells optional vector processors for mainframes that perform arithmetic on an entire string of

numbers at once—a way to tackle jobs such as simulating an automobile crash. IBM has installed about 1,000 vector units on 550 mainframes, giving them the speed of true supercomputers. Smaller Group Inc., a market researcher in Minneapolis, reckons that last year's sales of vector processors added \$480 million in revenues.

But Big Blue realized that even a souped-up mainframe isn't a true supercomputer. With circuits and hardware designed more for speeding through retail transactions than tracking global weather patterns, mainframes can't do the most challenging supercomputing jobs. That's why in 1987 IBM began investing in Supercomputing Systems Inc. SSI was founded by designer Steve Chen, who left Cray Research when it decided not to fund his plan to create a world-beating vector processor with as many as 64 individual processors working in parallel. After four years and an estimated \$100 million in funding from IBM, Chen has yet to fully describe the machine. SSI says test units will be ready next year, but the actual production schedule for the machines—costing an estimated \$70 million each—has not been set.

To cover its bets, meanwhile, IBM is pushing hard in massively parallel processing, or MPP. This is one of the most exciting yet most difficult technology in



MASSIVE FORCE: IBM'S KINGSTON (N.Y.) SUPERCOMPUTER LAB

computing gear around (table), ranging from speedy workstations to \$20 million souped-up mainframes that compete favorably with all but the fastest Crays. And IBM is involved in some of the most important supercomputing projects.

IBM is seeking more than bragging rights—or even just a bigger chunk of the \$2.5 billion supercomputing business. While it fully intends to boost its share of that market, IBM's real goal is to master the technologies that will soon be crucial to preserving the \$50 billion commercial mainframe business, which it still dominates with a 65% share.

STRONG BASE. Already, the lines are blurring between commercial and scientific computing. Wall Street is buying supers from Cray and Intel Corp. to model the behavior of complex financial markets. Insurers are considering so-called massively parallel supercomputers—consisting of hundreds or thousands of processors—to manage

ercomputing today. It has the poten- experts say, to do away with both ditional supercomputers, such as se from Cray Research, and tradition- mainframes, too. For IBM to fail in , therefore, may be for it to fail ntually in its bread-and-butter busi- s, commercial data processing.

n essence, MPP calls for ganging to- ner dozens, hundreds, or even thou- ds of cheap, powerful microproces- ; to attack large computing problems nasse. Choreographed with the right ware, 100 small processors can often cute large programs in a fraction of time it would take even the fastest litional supercomputer to run them in al fashion, one instruction at a time. l they can do the work for a tenth or n a twentieth of the cost of main- nes and traditional supers. Indeed, y Research has begun a crash effort uild an MPP add-on for its supers.

DO MOOD. Early this year, respond- to demands from some key custom- IBM decided to drastically speed up MPP development. In February, it set the Highly Parallel Supercomputing tems Laboratory in gston, N. Y., and an- nced that it will set t delivery dates by rend. The high-pro- lab draws funding knowhow from Big e's mainframe, kstation, research, government divi- as—an example of can-do climate that irman John F. ers has tried to fos- since reorganizing last December. The systems IBM is pro- ing, based on the e high-speed micro- cessors IBM uses in RS/6000 workstation , would by the late 0s reach theoretical k speeds of more n 1 trillion opera- s per second. lready, IBM has won ey endorsement for massively parallel aputing effort. Ar- ne National Labora- y, the Argonne (Ill.) S. government re- ch lab, has tapped to supply a giant system as the heart a proposed super- nputing research ter. The center is nned for use by both ernment and indus- scientists tackling

such huge problems as modeling what goes on in the core of a nuclear reactor.

Together, IBM and Argonne are asking the Energy Dept. for \$120 million to fund the project, about half of which would be spent on MPP hardware. Current plans call for IBM to install its first MPP system at Argonne in 1993 or 1994. A year later, IBM would install a production-level machine slated to perform up to 400 billion instructions per second while connected to an array of disk drives storing 6 trillion characters of information. A year after that, the IBM hardware will jump into the 1 trillion instructions-per-second range, Argonne officials say.

Impressive as the new MPP effort is, IBM's high-performance computing initiative is not without problems. For one thing, when it invested in Chen, IBM expected to see production machines in the first half of the '90s, a deadline that will almost certainly slip. And IBM's recent reorganization could hamper marketing efforts. At the same time IBM set up the new MPP lab, it cut back its supercom- puting marketing and sales group. The

sales team that had been dedicated to selling mainframe vector units was effectively dissolved. That leaves IBM's main sales force—albeit with the assistance of market support specialists—to sell the complex gear against Cray, Thinking Machines, Intel, and others.

HOT RIVALRY. The changes, say IBM executives, were part of the corporation's restructuring and cost-cutting efforts. But the moves may be short-sighted, says George Lindamood, a senior analyst at market researcher Gartner Group Inc.. If IBM can't make the key sales it needs to keep up with the leaders in supercomputing, soon it could start losing commercial customers, too. That's because MPP technology seems especially promising in commercial data processing work, says Lindamood. In a few years, he figures, customers will start buying today's scientific MPP machines to run huge transaction networks—for banks, say—that need to call on massive data bases. Such work is what most of IBM's mainframes now spend most of their time doing.

The competition is heating up. Suppliers—including AT&T's NCR unit, nCube, start-up Kendall Square Research, and software maker Oracle—are all pushing transaction-processing on MPP machines as an alternative to mainframes. Not only are the new machines cheaper, but they can also tackle jobs that weren't practical before: Wal-Mart Stores Inc. uses one to sift through an inventory and sales-trend data base totaling 1.8 trillion bytes of data. Other customers interested in the benefits of parallelism range from American Airlines Inc.'s SABRE unit to Hartford Life Insurance Co..

If there's one advantage IBM holds over those with a head start in MPP, it's deep pockets. Says analyst Gary Smaby: "The [MPP] sands haven't really settled. IBM has sufficient resources to fund multiple efforts. They're in an enviable position." IBM's challenge now is to turn position into profits.

By John W. Verity in New York, with Julie Flynn in Chicago

A BIG BLUE APPROACH TO SUPERCOMPUTERS

ENTERPRISE SYSTEMS DIV. Somers, N.Y.

By adding a specialized processor, IBM's general-purpose mainframes compete favorably on many problems with supercomputers from Cray Research and others
Peak speed: 2.7 billion instructions per second
Available since 1986

THOMAS J. WATSON LABORATORIES Yorktown Heights, N.Y.

The newly entrepreneurial IBM Research division has begun marketing the Power Visualization system, a 32-microprocessor machine for turning scientific data into powerful graphics

ADVANCED WORKSTATIONS DIV. Austin, Tex.

To tackle some problems, such as modeling electronic circuits, IBM has hooked up a cluster of up to 12 of its RS/6000 engineering workstations

HIGHLY PARALLEL SUPER- COMPUTING SYSTEMS LABORATORY Kingston, N.Y.

Funded jointly by several IBM divisions, this group is developing machines that will gang together hundreds and perhaps thousands of high-speed RISC microprocessors. A possible \$120 million Energy Dept. grant would help IBM work closely with Argonne National Labs in field testing and software development
Planned speeds: Beyond 1 trillion instructions per second (1 teraflops)
Delivery: Late 1990s

SUPERCOMPUTER SYSTEMS INC. Eau Claire, Wis.

IBM has invested an estimated \$100 million in this startup, founded by ex-Cray designer Steve Chen. His goal is an ultra-fast vector processor that IBM might use as an adjunct to its mainframes
Deliveries behind initial schedule. No date set

WordPerfect users prefer Windows no matter



Portland: 92% of WordPerfect users found Microsoft Word for Windows easier to learn.



Los Angeles: 72% of WordPerfect users, if given a choice, would use Microsoft Word for Windows over WordPerfect for Windows.



Washington, D.C.: 72% of WordPerfect users found Microsoft Word for Windows easier to learn.



Dallas: 88% of WordPerfect users preferred Microsoft Word for Windows over WordPerfect for Windows.

The 1992 Coast-to

The 1992 Word Challenge is over. And as you can see, the results speak for themselves. WordPerfect for DOS users all over the country prefer Word for Windows™ for everyday word processing tasks. Over the past two months, the National Software Testing Labs visited 10 different cities to ask WordPerfect users to compare WordPerfect for Windows and

Microsoft Word for Windows side-by-side. WordPerfect users were amazed at how Word put them one step away from accomplishing everyday word processing tasks with, in many instances, one simple click of the mouse. They found it that easy.

The tour was not only fun, but it definitely confirmed two very strong hunches we've had for some time. One, WordPerfect

er Microsoft Word for what state they're in.



Chicago: 68% of WordPerfect users, if given a choice, would buy Microsoft Word for Windows over WordPerfect for Windows.



St. Louis: 71% of WordPerfect users preferred Microsoft Word for Windows over WordPerfect for Windows.



Minneapolis: 88% of WordPerfect users felt that Microsoft Word for Windows was the easiest to use.



Atlanta: 74% of WordPerfect users felt that Microsoft Word for Windows was the easiest to use.



New York: 80% of WordPerfect users think that Microsoft Word for Windows is easier to use.

ast Word Challenge.

users prefer Word for Windows for everyday word processing tasks. And two, airports sell some very tacky souvenirs.

But you can see for yourself. Simply call us for a free "Word Challenge Kit." Included is a videocassette highlighting the actual test, and interviews with WordPerfect users who took the challenge. Also in the kit are the files you need to test

Word on your own. Call (800) 323-3577, Department HD2. We think once you get a chance to judge for yourself, you'll no doubt want to take advantage of our special \$129 upgrade offer.*

No matter what state you're in.

Microsoft
Making it easier

THIS ISN'T THE RESPONSE TV ANSWER EXPECTED

The interactive-TV outfit irked the FCC, and rivals are gaining

Back in his hometown of Monterrey, Fernando Morales' friends sometimes refer to him as the Steve Jobs of Mexico. The 45-year-old Morales has a slew of innovations to his name, including a system to synchronize traffic lights by radio signals. So after he got a U.S. patent in 1986 for a wireless network that would let television viewers talk back to their sets, he had no trouble raising \$80 million for it. He headed north, established TV Answer Inc. in Reston, Va., and recruited two Washington insiders to the board: former Federal Communications Commission Chairman Mark S. Fowler and George A. Keyworth, President Reagan's science adviser.

Morales has an enticing vision for "interactive" TV. By pointing a zapper at a TV-top box, viewers would respond to polls, order products, and play games against other viewers across the country. Signals would go from the receiver box to a local relay station and then via satellite to TV Answer. The company would collect fees from advertisers or, in some cases, from viewers. The plan is to begin operation in early 1993. By building a nationwide wireless network, Morales says, "what we're doing is inventing an industry."

But the tale of the Mexican inventor who makes good in the U.S. has developed some plot complications. Morales' first plan—to get the FCC to award him a national allocation of radio frequencies for his system—fell flat. Plan B is to get people across the country to apply for licenses, then become TV Answer franchisees. But it ran into static in April, when FCC commissioners questioned TV Answer's recruitment methods.

STRETCHED THIN? These setbacks—coming just as TV Answer is asking companies such as Hewlett-Packard Co. and Sony Corp. to put up some of the \$200 million needed to launch the system—have raised questions about Morales'

leadership. On the eve of a June 19 meeting, directors were considering whether to reduce his day-to-day duties. Tomas Milmo, TV Answer's chairman and a major shareholder in the \$1.7 billion Cementos Mexicanos, says he felt the technically savvy CEO was stretched too thin and needed help. Other directors wanted Morales to quit as CEO. Morales, who thinks he has done a good job, said he had no intention of stepping down but would like to lighten his workload.



FOUNDER MORALES IS HAVING TROUBLE WINNING AIRWAVE SPACE

Morales' first stumble was underestimating what it would take to get onto the airwaves. With Fowler and Keyworth on board, he figured it would be a cinch. Wrong. Instead of granting TV Answer one nationwide license for the necessary spectrum, on Jan. 16 the FCC decided to hand out two licenses for each of 734 markets around the country. Worse, it chose to speed things up by allocating licenses by lottery rather than by judging applicants on their merits.

That vastly complicated the job of putting together a nationwide service and prompted Morales to dream up his recruitment campaign. In full-page ads in national publications, he encouraged av-

erage Americans to enter the lottery—and—if they won—to become the TV Answer franchisees for their areas. They trumpeted the lottery as the "busiest opportunity of a lifetime," akin to cellular lotteries in the 1980s that produced overnight millionaires.

TOLD HIM SO. Former FCC Chairman Fowler says he warned Morales that the old agency might look askance at the ads, which failed to point out how remote the chances of winning were. Morales went ahead anyway. So, enough, the FCC is now preparing to warn consumers that the lottery—which costs \$1,400 to enter—is far from so sure. Morales withdrew the ads, which had drawn thousands of calls, but he still believes they were accurate.

Morales' lottery plan has another flaw: Winners may not choose to work with TV Answer. NBC Inc., for instance, has expressed interest in the same spectrum for unspecified purposes. Meanwhile, plenty of heavyweights—including Time Warner Inc., and other cable companies—are gearing up versions of interactive TV that don't require airwave licenses.

TV Answer, like the other players, is still trying to come up with compelling ideas for interactive programming. Customers will be asked to pay \$700 for a converter box and zapper that will allow home banking, bill-paying, interactive games, and electronic shopping. But those services, already offered on personal computer networks such as Prodigy Services Co., have not taken America by storm. "This is a classic example of technology looking for a market," says Gary H. Ritten, a consultant who has done work for a rival interactive-TV company. Even TV Answer directors are cautious. "It's either a big business or no business at all," admits Keyworth.

Still, TV Answer has wealthy, patient Mexican backers. Morales and three investment groups—one headed by Milmo, another by Mexican investment bank Invworld, and another by a Coca-Cola bottler—control 90% of the stock. Their support and Morales' technological expertise make it hard to dismiss TV Answer. But the history of high-tech communications is littered with novel ideas that couldn't find a market. That leads to a lot of questions about TV Answer.

By Mark Lewyn in Reston, Va.

EXPERTS AGREE: OKIDATA'S NEW PRINTER GIVES YOU DELICIOUS OUTPUT!



The new Okidata OL810 will satisfy your appetite for professional-looking text and graphics...producing 8 pages a minute of tasty output from even the newest software applications.

Our engineers enhanced Okidata's ingenious solid-state LED printhead for even crisper performance. Thanks to a bit of wizardry called OKI Smoothing Technology,[™] it now delivers much higher resolution – up to 300x1200 apparent dots per inch. And with full HP[®] LaserJet[™] III compatibility, you'll enjoy an appetizing assortment of font-scaling choices (13 fully scalable

and 42 bitmapped fonts are built in), plus all the speed and flexibility the latest Windows[™] applications demand from a printer. And all the dependable performance you've come to expect from Okidata.

**OKIDATA BRINGS
IMPROVED-
RESOLUTION LED
PRINTING TO
THE OFFICE.**

When you get hungry to upgrade, the OL810 has a full menu to offer: up to 5MB memory for heavy graphics and shared applications, a second 200-sheet paper tray and mechanism, or a serial interface.



So don't just sit there drooling – call 1(800) OKIDATA today for the name of a dealer near you. And get a taste of the future of page printing.

IT'S GOT TO BE THIS GOOD TO BE OKI OK![™]

OKIDATA and the OKI OK! are Registered Trademarks of OKI Electric Industry, LTD. HP and LaserJet are Registered Trademarks of Hewlett Packard Inc. Windows is a Trademark of Microsoft Corp. OKI Smoothing Technology is a Trademark of OKI America, Inc.


**Money Can't Buy Peace,
Love And Understanding.**

**It Can Buy
Freight Cars, Factories
And Forklifts.**

It is incumbent upon us all to employ our particular strengths to solve the problems that exist in our country. As lenders, our strength is seemingly more financial than philosophical or spiritual. Yet one can't ignore the impact that economics have on the tenor of our times.

Our role in the economy is to lend money to companies by allowing them to access the equity of their assets for capital. Capital that can help them grow, create jobs and in general help rebuild the country's economic momentum.

As America's most experienced asset-based lender we know our money or anyone else's can't solve the big problems. It can, however, solve a lot of little ones. And eventually all the little ones add up.

For information, call The CIT Group at **1-800-545-5440**.



AMERICA'S
MOST EXPERIENCED
ASSET-BASED
LENDER

DETROIT'S BIG CHANCE

CAN IT REGAIN BUSINESS AND RESPECT IT LOST IN THE PAST 20 YEARS?

Twice in the past 10 years, Garland West walked into Minneapolis showrooms intending to buy an American car. But each time, after "some hard decisions regarding value for the money," he and his wife, Nancy, went Japanese. So the Wests were surprised when they looked again in May and found, says Garland, a Cargill Inc. executive, that suddenly "it's a very simple choice to buy American." After comparing models on price, features, and published reviews, the couple ordered a \$20,500 Jeep Grand Cherokee. The only tough call was between two domestics: the Ford Explorer and the Jeep.

The Wests aren't alone. As car sales rise along with the U.S. economy, Detroit is starting to score against its Japanese competitors. In the first five months of 1992, U.S. carmakers have grabbed 72.4% of the domestic car and light-truck market, up 1.6 points from a year ago. The Japanese, meanwhile, have lost 1.4 points, to 24%. Each point of market share is worth about \$2 billion in revenue. And Big Three profits are coming back, largely because GM, Ford, and Chrysler have cut back on discounted—and money-losing—sales to rental-car companies. "If market share is going to come at the cost of profitability, we're

going to back away," said John "Jack" Smith Jr., General Motors Corp.'s new president, at the company's May 22 annual meeting. "[But] if we do run a very aggressive product program, market share will take care of itself. **PERFORM—OR ELSE.** The Big Three have enjoyed other upticks over the past decades, and every time they've blown their big chance. But there are persuasive arguments why, this time, their rebound may be longer-lasting. For obstinate corporate boards have installed new No. 2 executives at GM and Chrysler, sending a neon message to en-

AMERICA'S BIG THREE...



SEVILLE STS
CADILLAC, 1992



...VS. JAPAN'S BIG THREE



ALTIMA
NISSAN, 1992



CAMRY
TOYOTA, 1992



ACCORD EX
HONDA, 1992

CAN DETROIT SEIZE ITS OPPORTUNITY?

How the
Big Three
could claw
back

ached management to start perform-
or else. Under the gun, even manag-
at stolid GM are finally attacking the
pany's ultrahigh expenses, while
Motor Co. and Chrysler Corp., by
e estimates, have already cut their
near-Japanese levels.

Thrift is just part of Detroit's new
e. The Big Three now lead the Japa-
e in fuel economy and safety fea-
es. They're speeding up product intro-
uctions and rebounding from years of
ign doldrums. In fact, Detroit has
e spiffy new models in showrooms
n it has had in years. Mo-
n dominates hot seg-
nts such as minivans
sport-utility vehicles
the one the Wests
buying—segments
t barely existed a de-
e ago. And look at the
tle in midsize sedans.

d's redesigned Taurus has a
d chance of becoming the top-selling
S. model this year, unseating Honda
tor Co.'s Accord, which has held the
e since 1989. Chrysler's sleek new LH
will enter the fray this fall, knock-
bumpers with Taurus, Accord, and
ota's new Camry.

Most promising of all is that just as
Big Three are starting to roll, their
anese counterparts are beginning to
suffer. Capital

is costing them more, for one thing. As
recently as 1985, Japanese companies
paid 3.3 percentage points less for mon-
ey than Detroit did. Now, says Lehman
Brothers, the collapse of the Tokyo
stock market, plus higher interest rates,
have raised the real cost of capital in
Japan to 5.6%, the same as in the U.S.
And with Washington beating its chest
over trade deficits, the Tokyo govern-
ment has tightened quotas on exports to
the U.S. and is pushing its carmakers to

san Motor Co. And Kenichi Kato, man-
aging director of Toyota Motor Corp.,
adds: "Already, [Japan's auto makers]
see a downward trend of sales. Our
question is, how far down? We are very
concerned about that."

HOLDING ITS OWN. Add it all up, and
these trends amount to a golden oppor-
tunity for the Big Three to regain some
of the business—and respect—they've
lost over the past two decades. Chrysler
President Robert A. Lutz predicts that
the U.S. companies will pick up at
least a point of market share annu-
ally against Japan over
the next four years. Other
forecasters feel that
Detroit may hold on to
its current share, though
some aren't sure for how
long. Even Nissan's
Hanawa agrees that "this is
a good chance for the Big Three. They
seem to be using it."

If Detroit can bounce back for real,
there will be more winners than the
workers in Flint and dealers in Dallas.
Better Big Three performance could help
cut the U.S. trade deficit and ease U.S.-
Japanese tensions. Reviving U.S. auto
sales could add zest to the sluggish re-
covery. Over the long haul, a resurgent
Detroit might help revitalize U.S. manu-
facturing. After all, one in seven jobs is
tied to the auto industry, whose employ-
ees pay one in eight tax dollars.

Detroit's challenge is to go far fast,



**DODGE VIPER:
FROM CONCEPT TO
DELIVERY IN 36
MONTHS**

bring out new mod-
els less often. Part-
ly in response, Japa-
nese carmakers
hiked sticker prices
by up to 5% this spring, while Detroit
merely pared dealer and customer incen-
tives and kept its list prices steady.

These days, in fact, Japanese execu-
tives are starting to worry. "In this envi-
ronment, the strength of Japan's car-
makers will decline," predicts Yoshikazu
Hanawa, executive vice-president of Nis-

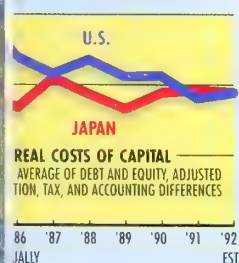


**DODGE INTREPID
CHRYSLER, 1993**



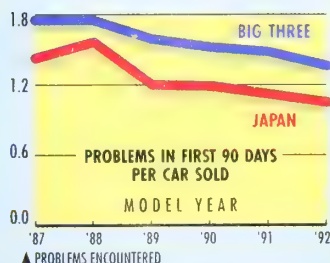
**TAURUS LX
FORD, 1992**

...EXPLOITING EASIER CAPITAL...



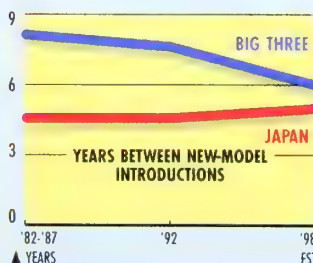
DATA: LEHMAN BROTHERS INC.

...AND MATCHING JAPAN'S QUALITY GAINS...



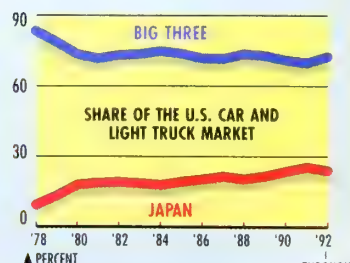
DATA: J.D. POWER & ASSOCIATES INC.

...WHILE SHORTENING TIME TO MARKET...



DATA: PRODUCT DEVELOPMENT PERFORMANCE, BY KIM B.
CLARK AND TAKAHIRO FUJIMOTO; AUTOPACIFIC GROUP INC.

...DETROIT MAY BOOST ITS MARKET SHARE



DATA: WARD'S AUTOMOTIVE REPORTS

before the Japanese regroup. Anti-Japan rhetoric should ease after the U.S. election, lessening pressure against imports. So protectionist measures that help Detroit now—such as a 25% tariff on imported pickups—aren't likely to last forever. Meanwhile, Japanese carmakers are still spending heavily on R&D and capital improvements, many of which are going into their U.S. factories to help end-run import quotas. That leaves more room under the limits to bring in higher-margin luxury cars that compete

crucial investments in manufacturing. Chrysler Chairman Lee Iacocca concedes the lurking danger of Detroit's "dirty habits: get a little fat, take a few shortcuts, or hire too many people." The Big Three swear not to slack off this time. "We don't dare take our eye off the ball," says GM Chairman Robert C. Stempel. "If we back off on this drive for cost and quality competitiveness, we're going to be losers."

But can Detroit really put last year's \$7.5 billion collective loss behind it, stifle

January when Iacocca's 14-year reign ends. At Ford, Chairman Harold "Red" Poling is expected to retire next spring. The top contenders for his job are an ex-RAF pilot, North America Automotive Operations chief Alexander J. Trotman, and Allan D. Gilmour, a former finance executive who heads all of Ford's auto operations.

As they operate under a microscope, the mandate for these new whiz kids is to run their core auto businesses aggressively. One strategy they're bound to

pursue is to reverse the underinvestment of the late 1980s. Already, Ford plans to spend more than \$3 billion over two years to develop electronic transmissions and advanced multivalve engines, technologies the Japanese have had for a while. Chrysler is spending \$2.8 billion this year to introduce the Grand Cherokee plus its LH line of sedans. And with balance sheets shaky after last year's losses, the key to generating cash for each company has to be cutting costs.

CRISIS MENTALITY. Ford and Chrysler are nearing parity with Japanese costs, says Clyde V. Prestowitz Jr., president of the Washington-based Economic Strategy Institute. In a new study, Prestowitz looked at factors such as capital costs, capacity utilization, and currency variations to calculate that Toyota's production cost for a small car is \$6,342. Ford is next at \$6,591. Honda, Mazda, and Nissan are bunched between Ford and Chrysler, at \$7,160. GM is the laggard, at \$9,068.

Financially strapped Chrysler has reorganized the fastest. Since 1989, the No. 3 automaker has remade itself by eliminating superfluous tasks and reinventing its new-product teams. Designers, manufacturing experts, and marketers all work together, breaking down the usual departmental barriers, cutting bureaucracy, and saving time. This approach let Chrysler design and engineer its LH sedans in just 40 months, a year faster than earlier models. And Chrysler claims it's now about even with Japan: Its \$50,000 Dodge Viper sports car took 36 months from inception to delivery, and its new PL subcompact, due out in late 1993, is being developed just as fast.

Chrysler has also imbued itself with a

Chrysler has named a CEO-designate, GM has a new top operations man, and two prospects have emerged to succeed Ford's chief when he retires next year

DETROIT'S NEW LEADERS AND THE TASKS THEY FACE

GENERAL MOTORS



PRESIDENT JACK SMITH

STRENGTHS

- ▶ Strong European operations
- ▶ Nonauto operations such as EDS and Hughes give profit cushion
- ▶ Strong brands enhanced by new models, and more are coming

CHALLENGES

- ▶ Cut sky-high costs
- ▶ Keep up employee morale during reorganization and retrenchment
- ▶ Pare some models

FORD



EXECUTIVE VICE-PRESIDENTS ALEX TROTMAN AND ALLAN GILMOUR

STRENGTHS

- ▶ Efficient manufacturing makes it a low-cost producer
- ▶ Hit models such as Taurus and Explorer
- ▶ Leading in new marketing techniques such as no-haggle pricing

CHALLENGES

- ▶ Speed up replacement of aging models
- ▶ Turn around its money-losing Jaguar subsidiary
- ▶ Catch up in engines, transmissions

CHRYSLER



VICE-CHAIRMAN ROBERT EATON

STRENGTHS

- ▶ Booming minivan and Jeep sales
- ▶ Classy new models on the way such as LH sedans, a subcompact, and a pickup
- ▶ Has Detroit's leanest management structure

CHALLENGES

- ▶ Shore up weak finances
- ▶ Avoid snafus in new-model introductions
- ▶ Drop either the Eagle or Plymouth line to refocus brands

with Detroit's last profit strongholds.

Detroit can do a lot to stay in the passing lane. In previous recoveries, the Big Three tended to hawk too many subcompact cars and forget the recession's hard lessons. The urgency of their cost-cutting disappeared. To maximize profits, they raised prices to Japanese levels. Then they frittered the money away on stock repurchases, fat salaries, and ill-advised diversifications outside the car business. All the while, they neglected

its tendency to seek immediate gains, and focus on long-term strategies? That depends on stronger management—and belatedly, the industry may be getting some. In April, GM's board demoted former President Lloyd E. Reuss and replaced him with Jack Smith, a proven rejuvenator who brought lots of horsepower to GM's European unit. Just weeks before, Chrysler's board hired Robert J. Eaton, also previously of GM Europe, to take over as chairman next

breaking down the usual departmental barriers, cutting bureaucracy, and saving time. This approach let Chrysler design and engineer its LH sedans in just 40 months, a year faster than earlier models. And Chrysler claims it's now about even with Japan: Its \$50,000 Dodge Viper sports car took 36 months from inception to delivery, and its new PL subcompact, due out in late 1993, is being developed just as fast.

Chrysler has also imbued itself with a

s mentality that helped it cut overall costs by \$3 billion from 1989 through 1990. Even suppliers were dragged into the effort: They've saved the company \$1 billion since 1989 by suggesting ways to dispense with duplication, paperwork, and nitpicky specifications. Chrysler's goal this year: to whack \$1 billion off costs. Such slashing helped the company approach breakeven in last year's fourth quarter despite big spending on new products.

Even GM now sees that it can't cut costs without fundamentally changing its organization. Until now, the No. 1 automaker has been divided into divisional fiefdoms that spawned "castles of thousands" bureaucracies, as Furman Inc. analyst Maryann N. Keller puts it. Now, GM is borrowing ideas from its stouthern rivals. It has just realigned its North American auto operations into a single entity, à la Ford, while grouping product managers around specific vehicle lines, as Chrysler does. And with that setting the pace, GM's executives are starting to sweat. Smith has speeded up GM's planned makeover and has named proven innovators to key posts.

Any one of the several business strategies GM's new honchos are pushing could mark a major change," Stempel says. GM plans to adopt Japanese-style "lean" production techniques, close 10 assembly plants, and continue a wave of model introductions. It also wants to trim its rolls by 24,000 white-collar jobs and 50,000 blue-collar workers by mid-1993. It claims that since December, 1990 blue-collar jobs have been cut by 10%, early retirement, and buyouts.

IN BIDDING. Some of GM's biggest savings may come from its plan to scour the globe for deals on parts. Like other top lieutenants, J. Ignacio Lopez de la Haza, GM's new procurement czar, isn't dally. A Spaniard who earned his stripes in a similar job under Smith at GM Europe, his idea of a vacation includes visiting suppliers' factories and working on changing their production systems," says James P. Womack, co-author of *The Machine That Changed the World*, a 1990 study of the auto industry. "He's more Toyota than Toyota."

Lopez shocked GM's 5,700 suppliers on Feb. 2 with news of his "global sourcing" plan. GM had already asked suppliers to cut prices by 7% according to a "3-year plan"—3% in 1991, 2% in 1992, and 2% in 1993. But Lopez considers that "a drop in the bucket," says one supplier. Lopez claims to have wrung price cuts up to 68% from suppliers in Europe. In search of such numbers, he'll open all his contracts, including those held by divisions, to competitive bids. The search for efficient, top-quality suppliers: a chance to sell to GM worldwide.

That's just the start of the Big

WHERE DETROIT IS LEAVING IMPORTS IN THE DUST

David Seyler is the kind of customer Detroit needs. Last December, the Urbana (Ill.) contractor looked at Toyota pickups—then bought his fourth Ford in 20 years, a blue 1992 F-150. That Seyler even considered a Japanese truck is a sign of rising competition in a Detroit stronghold. That he bought a domestic shows how tough the Big Three are in trucks.

Holding on to buyers of light trucks—defined as pickups, minivans, and sport-utility vehicles—is one of Detroit's top goals. U.S. carmakers have an 85% share of North America's light-truck sales, vs. just 65% in autos. These models earn fat profits, ranging from \$4,000 for minivans to \$8,000 for Jeep's new top-of-the-line Grand Cherokee. And they're a growth segment, accounting for 37% of U.S. vehicle sales, up from 25% a decade ago. That

President Robert A. Lutz. "It's already happening in trucks."

Indeed, Detroit is pushing hard to hold the lead. Ford shelled out a record \$2 billion to revamp truck models in 1991 and will spend \$3.6 billion more through 1995 to upgrade six truck plants. Among its new products: a replacement for the 20-year-old Econoline van, a makeover of the Ranger small pickup for this fall, and a Toyota-busting midsize pickup for the mid-1990s.

To lure better-heeled buyers, Detroit is adding more car-like features. For instance, when Chrysler redesigned its minivans for 1991, it made the interior more comfy. It simplified the controls, giving them a smoother feel, and added features such as optional airbags—the first for any minivan. Through May, Chrysler's share of the booming minivan market is up seven points, to



makes them targets for Japan. Toyota Motor Corp.'s compact pickup is selling well stateside, and Toyota plans to unveil Japan's first midsize pickup in the 1993 model year. Other Japanese rivals may follow. "Whatever chinks there are in our armor we've got to fill in fast," says James D. Donaldson, assistant general manager of Ford Motor Co.'s truck operations.

Detroit will be hard to beat. The U.S. companies invented two of the hottest products, minivans and sport-utility vehicles. And Japan can't match Motown's economies of scale. Ford sold 432,122 F-Series pickups last year, making it the country's top-seller. Truck owners tend to be loyal, too. Little wonder that Detroit has already beaten back Japan in small pickups. "Everybody's asking, can Detroit claw back in cars?" notes Chrysler Corp.

51%, vs. the same period in 1990. **DUMPED TRUCKS.** If all that doesn't keep the Japanese at bay, Detroit hopes Washington will. There's already a 25% U.S. tariff on imported pickups and two-door sport-utility vehicles. The Commerce Dept. has upheld Detroit's charge that Mazda Motor Corp. and Toyota have been dumping minivans in the U.S. and levied punitive tariffs of up to 12.7%. A review by the U.S. International Trade Commission is due by July 2.

Still, the Japanese aren't giving up. In compact trucks, their rebates average \$1,300. And Toyota has just started making compact pickups in California, bypassing the 25% tariff. The message to Detroit is clear: Keep the innovations flowing or risk losing buyers such as David Seyler.

By David Woodruff in Detroit



WHAT, EXACTLY, IS ACCEPTABLE RISK?

Last night you powered down a cholesterol-rich pasta with cream sauce. This morning you jaywalked across a busy four-lane street, and next weekend you're going to trust some nineteen-year-old who tells you there's no way the bungee cord can break.

Next to that, choosing new computer equipment is merely *career* threatening.

We don't think it should be quite so risky. Which explains the existence of NetWare®, Novell's networking software that unites such strange bedfellows as IBM and Sun; Oracle and Microsoft.

NetWare not only preserves investments you've made, it'll accommodate whatever decisions you make next year. Our eighth generation products are the result of alliances we've built with over 2500 software, hardware and system vendors, who've designed and tested thousands of *their* products to work with ours.

Which means you really only have to ask one question to make your next risk an acceptable one. "Does it run with NetWare?"



The Past, Present, and Future of Network Computing.

FOR MORE INFORMATION, CALL 1-800-NETWARE.

Three's new initiatives. They all plan to speed up new-product introductions, for instance. "In the last downturn" in 1980-81, recalls Robert L. Rewey, Ford's vice-president for sales, "the domestics tended to stretch things out in anticipation that the Japanese would ease off." But now, instead of just riding the success of its two-year-old Explorer, Ford has a major redesign in the works for next year. "We have no intention of relaxing anywhere this time," says Rewey.

Given such speedy redesigns, Christopher W. Cedergren, an analyst with researcher AutoPacific Group Inc. in Santa Ana, Calif., figures that by the late 1990s, Detroit will be making model changeovers every six years, on average. That compares with every 7.6 years now, three years longer than for Japanese cars. Meanwhile, Japanese producers will be slowed by political pressure and financial strains on companies such as Nissan and Isuzu, which went on capital spending binges only to be hit hard by Japan's deep auto sales slump. The upshot: By the late 1990s, U.S. companies will be just a year slower than their Japanese rivals.

STANDARD OPTIONS. To make sure their new metal moves, Detroit is jazzing up marketing, too. For instance, it's culling lame models to give its lineups better focus. Chrysler recently stopped building its Jeep Comanche pickup, of which it sold only 6,663 last year, so corporate marketers can devote more resources to the Cherokee and the new Grand Cherokee. GM also may get rid of such slow-sellers as the Oldsmobile Bravada and the boat-shaped Chevrolet Caprice.

Ford is juicing up sales by taking a concept called one-price marketing a step further than the Japanese do. The idea is to repackage former options into standard equipment as a way to make prices less complex—and make them stick. Ford's Escort can be bought as a hatchback, two-door, four-door, or station wagon—all with the same options at an identical \$10,899 price. After trying the idea on both coasts, Ford went national with it in March—and sales of the subcompact Escort are up 16% since then. Ford also is trying the strategy in California to goose sales of the Thunderbird. Saturn, GM's import killer, also has been successful with a simplified pricing structure, and other car-makers are toying with similar moves.

Meanwhile, Detroit is trying to surpass Japan's best styling. In the frenzy to come up with fuel-efficient autos in the 1970s and 1980s, the Big Three lost the flair for innovative design that produced such classics as the 1964 Mustang. But starting with Ford's aerodynamic Taurus in the mid-1980s, Detroit has been pioneering designs again, with



A SHOWROOM SHOWDOWN IN THOUSAND OAKS, CALIF.

Chrysler and GM now making their mark.

Chrysler's new LH and PL cars, for example, have sleek good looks and a "calm forward" design that adds extra interior space. GM's neatest new models include the cat-eyed Pontiac Bonneville, the Cadillac Seville, and an elegant Buick Park Avenue. A Chevy Cavalier due out in 1994 has the rounded look of BMW's 3 Series.

IT'S NOT ALL THAT EASY HAVING A HIT. JUST ASK CADDY

When General Motors Corp.'s Detroit-Hamtramck assembly plant opened in 1985, its robots ran amok. Some smashed windshields, while others painted each other instead of the Cadillacs made there. Then the Cadillac Motor Car Div. made Hamtramck the centerpiece of its quality drive, won a Malcolm Baldrige National Quality Award in 1990, and gave the plant its best model in years—the award-winning Seville STS. In fact, Hamtramck can't keep up with STS demand. And that makes it an example of how far the U.S. auto industry, and GM, have come—and how far they have to go.

"If you've done a real terrific job in designing a new car, you're gonna be short cars," exults Edward D. Du-

Charme, Cadillac's manufacturing manager. "And boy, is that great." But not always. Shortages after the car's launch last fall kept some customers waiting up to four months for an STS. "To some people, it seems like an eternity," says superdealer Don Massey of Plymouth, Mich., who sells 5% of all Cadillacs purchased in the U.S. Massey suspects that GM lost sales as a result.

Part of the problem is that Cadillac misjudged the market. It thought 75% of Hamtramck's production would be the Seville's sister car, the two-door Eldorado, 15% would be the basic Seville, and only 10% would be the STS, which retails for \$38,500. Instead, 58% of the output is the Seville, half of that the STS. Suppliers have struggled to keep up

while quality glitches have slowed output. On some days last August and September, as many as half the cars were pulled off the line for rework. The plant wasn't up to full production of cars a day until February. Dealers are short of cars, although they praise GM for keeping standards high.

MORE GLITCHES. Trouble is, the standards haven't been all that high. In the months of production, cars slipped with crooked body panels and blemish paint. Taking a page from Japan's GM had asked the plant's workers to solve those problems but didn't start the program until the car's basic engine was done. By the time production began last summer, workers had identified some 700 problems in the Seville and Eldorado. Looking at a molding below the rear bumper, for example, Randy Cienski, an engineer assigned to have workers identify snafus, laments: "Everyone knew it wouldn't fit." Some glitches were fixed before production



schools. "They're soft, melted butter." But for every stunner Detroit comes out with, Japanese carmakers seem to have one, too. Mazda's Miata roadster is a good example, and there are plenty of others: Infiniti's new J30 coupe, Mazda's sleek, Euro-styled 929, and Nissan's Altima, due out soon. For GM to even vie with such cars is impressive, given how severely it was criticized in the 1980s for having so many look-alike models.

FLEXTIME. To be sure, Motown still has to overcome some powerful negatives. Perhaps the biggest is in manufacturing. Detroit has made giant strides over the past decade. Manufacturing consultant James E. Harbour says Ford's Atlanta assembly plant is the most efficient in the U.S. And in quality, a GM factory in Oklahoma City was No. 1 in J. D. Power & Associates Inc.'s 1992 ranking of North American plants that make cars with the fewest defects. The Buick Centuries and Oldsmobile Cutlass Cieras made there average just 0.71 defects per car. A Toyota plant in Ontario was No. 2, with 0.72 defects per car.

But Detroit's manufacturing tech-

niques haven't kept up as U.S. auto demand has shifted to more niche markets and shorter production runs. Dealing with those trends requires Japanese-style flexible manufacturing, a technique that allows the production of several very different models on the same line. The Big Three have thrown money at the challenge without making much headway. In the 1980s, GM lavished \$50 billion on assembly-plant modernization, supposedly including the installation of flexible manufacturing machinery. But since then, it, Ford, and Chrysler have stuck mainly to plants dedicated to versions of the same model.

The Big Three are only just beginning to change this. For instance, they have recently started prodding their development teams to coordinate among themselves and with manufacturing specialists to build more vehicles from common components—a crucial first step in flexible production. And only GM is now pushing toward Japan-style flexibility—in selected plants. Its Lansing (Mich.) factory already builds three small-car models on two production lines. The goal is to give all of the company's small-car plants—at Lansing, Lordstown, Ohio, and Linden, N.J.—the ability to build at least three models per line by the mid-1990s. Largely to avoid the added complexity, which can hurt productivity, Ford and Chrysler have shied away from such efforts.

That leaves the Big Three at a huge disadvantage. Flexible manufacturing avoids having to keep separate factories for low-volume models and allows a plant to run full tilt even if one model's sales slump. Without it, Ford is con-

ts. The revamped Buick Riviera, due in late 1993, is a knockout, too. Japan, of course, isn't hurting that much. Some design experts argue that cars are starting to display a bland sameness. "There is a new generic Japanese design," contends Carl L. Olsen, chief of transportation design at the DePaul-based Center for Creative Studies, "one of the world's premier auto-design

another 200 were still being shipped as cars were being shipped. "We want to do better?" asks Hamtramck. "Hell, yes."

This year, GM stepped in. It replaced Cadillac's previous manufacturing manager with DuCharme. Hamtramck, now plant manager, says Herb Stone, who arrived in February, laid down a new law: "If we're having first-time quality, it can't leave the plant without a reworkment." Today, Cadillac is right on cars after the Seville, a 90% improvement. And that has eliminated costly re-line paint rework, an internal audit in early 1992 found 5.1 defects per car vs. a target of

1.0. By contrast, J. D. Power & Associates Inc.'s initial quality survey found 0.46 defects per Lexus LS400 last fall—and 21 other models, none of them Cadillacs, had less than one defect per car.

Now, Hamtramck has to push quality higher while digesting a dizzying array

of changes. This summer, the Seville and Eldorado will be equipped with GM's new 32-valve, 290-horsepower V-8 Northstar engine, requiring modification of many parts. Later, every paint line will be converted to a less-polluting process. Next summer, a second shift will be added for

the first time since 1987, bringing in workers unfamiliar with the plant's culture of union-management cooperation. About then, Hamtramck will begin producing Fleetwoods and de Villes as well, making it GM's only all-Cadillac plant.

Juggling all that while continuing to troubleshoot is a daunting agenda. But no more tough than the task that faces the entire auto industry.

By James B. Treece in Hamtramck



ON SOME DAYS, HALF THE SEVILLES NEEDED REWORKING

down to efficiency, such as making its Taurus plant an underground Lorain (Ohio) factory, while plants in Atlanta and Chicago pay overtime to meet Taurus demand. Similar manufacturing strategies are being used to build enough of some hit models: Saturn, the Chevy Suburban sport-utility wagon and the Cadillac Seville (page 58).

The Big Three can't afford such dithering much longer. Indeed, if they let down their guards this time, they could get caught in a cost-price spiral. New costs at least \$1 billion to develop an all-new car model—a tab that has already driven many small European producers out of business. With their existing cost structures and high-volume production approach, the Big Three may not all survive if their market share erodes by six points in the 1990s as it did in the 1980s.

'COUPLE OF BOOMERS.' Moreover, consumers want to see more Detroit second, third, and fourth chances. The "Buy America" sentiment is pulling some customers into showrooms, but improved quality and low prices are selling the wheels. For example, Paul McMahon of Mishawaka, Ind., a vice-president at a metal-stamping company, traded his 1988 Honda Prelude for a new Taurus recently—in part because five of his friends are happy with their recent Ford purchases. "The quality is as good, if not better than a Honda's," says McMahon. "If it weren't, I'd have bought another Japanese car." Detroit knows that buyers will defect once again if domestic models disappoint them. Iacocca, for one, gets a stream of letters from customers who issue a warning: "I'll give you one last chance."

For the moment, Detroit is cashing in on that sentiment. U.S. carmakers' modest 0.9% gain in car sales during the first five months of 1992 drastically understates the comeback so far, says analyst Joseph G. Paul of Sanford C. Bernstein & Co. He estimates that by cutting their collective sales to rental-car fleets by 20%, the Big Three masked a 15% surge in their more lucrative retail sales. Although the recovery from the auto sales slump has been slow, when pent-up consumer demand finally kicks in, says Iacocca, "we're going to have a couple of boomers here—fantastic years." He adds: "We're going to look like geniuses for a while." Maybe so, if the Big Three can avoid repeating the mistakes of their past. But Iacocca and his peers are not enough anymore. With Japan on the move, what counts is staying power.

Articles: Karen Leavy Miller in Tokyo, and



FAMILIES

WHERE HAVE ALL THE FAMILIES GONE?

The rise in single-parent households will keep rocking the nation

Whether the merits of President Dan Quayle's arguments on morality and the family, it is certainly true that the American family has been radically transformed over the past three decades.

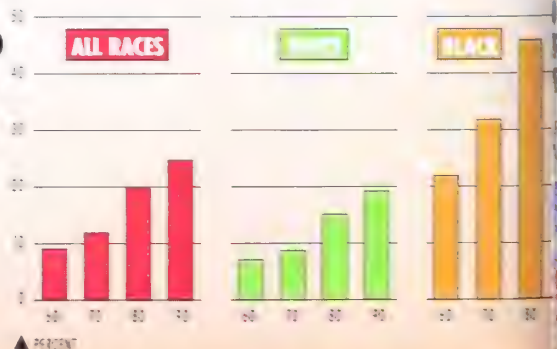
Simply put, the traditional, two-parent family is under siege. It is being displaced by the single-parent household. The percentage of white children living with one parent has almost tripled, to 19.2% during the past three decades, and

it has more than doubled among blacks to 54.8%. About half of all marriages now end in divorce, and out-of-wedlock births have rocketed. Consider this: a majority of children born today will spend at least some of their youth in a single-parent household.

Why has family structure changed so dramatically? Many reasons, including laws making it simpler to divorce and debilitating urban drug culture that tears apart many families. To Christo-

MORE CHILDREN ARE BEING RAISED BY ONE PARENT...

PERCENT OF CHILDREN UNDER 18 LIVING WITH ONLY ONE PARENT



Jencks, sociologist at Northwestern University, the stable, two-parent family ground to broad cultural changes, as more permissive attitudes to sex and marriage.

For economists, the most potent forces for the change are economic. They say that the surge of women into the labor force and the stunning drop in wages of less educated men account for much of the decline in the traditional family. Millions of men became poorer winners, and millions of women became more financially independent. "It's sheer action at work," says Robert D. Erick, economist at the University of Michigan. And if the pincer continues to create more and more single-parent families, economic growth will suffer.

INCENTIVE. From the early 1970s, global competition woke up many a U.S. manufacturer. To stay competitive, they streamlined their domestic production and opened new operations abroad. As American businesses went global, the competition from low-cost foreign labor drove down the wages of skilled workers at home. For example, the wages of men with a high school education fell by 20.7% from 1973 to 1990 (after adjusting for inflation). Those with less than a high school education saw their paychecks cut by an average 26.4%, and the wage decline for urban black workers came to a staggering 50%.

A good part of the sharp decline in wage rates among blacks can be attributed to a sharp drop in the employment opportunities of young black men, says William J. Wilson of the University of Chicago. These men are less able to support a family. Economists agree.

Wilson says that this economic factor played a role, although the size of its effect is hotly debated.

The huge influx of women into the job market was itself a result of economic changes. The growing service sector offered women plentiful job opportunities. But the economy's stagnant productivity performance since 1973 forced women to shore up their

family's eroding standard of living. Female participation in the labor force, the proportion of women working or looking for work relative to women in the population as a whole, soared from 38% in 1960 to almost 58% in 1991. (Since 1990, female labor force participation has declined a fraction as more women had babies and the recession cut jobs.)

And as women moved into jobs, they steadily moved up the earnings ladder. Women's earnings as a percent of men's wages for full-time work in all occupations reached an all-time high of 71% in 1990, up from 60% a decade ago. So from an economic perspective, women have less of an incentive to get or to stay married. "The propensity to split rises when women are doing better," says Gary S. Becker, economist at the University of Chicago, *BUSINESS WEEK* columnist, and a pioneer in the economics of the family.

WELFARE MYTH. Surprisingly, although many people believe the welfare system is behind the rise in single-parent families, most economists now agree that the impact of welfare has been limited. True, welfare payments do reduce a mother's reliance on a husband's earnings. And yes, single motherhood did increase as welfare payments rose between 1960 and 1970. But single parenthood continued to spiral higher even after benefits, adjusted for inflation, declined after the mid-1970s, points out David T. Ellwood, professor of public policy at Harvard University. Adds Isabel V. Sawhill, senior fellow at the Urban Institute: "The evidence suggests that welfare can explain only a small piece of the increase."

Clearly, more women working and globalization have reaped huge rewards for the U.S. economy. But some economists worry that the rise in single-parent

households also carries an economic price. For one thing, poverty in the U.S. could become more intractable. Single-parent families are overwhelmingly poor. The poverty rate of married-couple families with children was 7.8%, compared with 44.5% among female-headed households.

More troublesome still, children of single-parent households often don't get enough in the way of good education and adequate health care, a drag on their economic potential as adults. Recent research shows that children of single parents are less likely to complete high school and more likely to have low earnings and low employment stability as adults than children raised in two-parent families. That's why many economists believe that both the government and the private

sector will need to invest more in "human capital" in the 1990s.

The rise of single-parent households will crimp spending on such big-ticket items as houses. And a few economists even fret that a weakening of family ties among the better-off could put a further drag on the already anemic U.S. savings rate. Divorce and out-of-wedlock births are fraying the bonds between generations. The elderly have every incentive to consume their wealth and leave less to their heirs, reducing the pool of accumulated savings, says Laurence J. Kotlikoff, economist at Boston University.

The word "economics" comes from the Greek *oikonomia*, or household management. Economists this century have tended to ignore the family, concentrating on inflation, recession, and recovery. That could change as the transformation of the American family begins to affect living standards as much as the swings of the business cycle.

By Christopher Farrell in New York

The popular view is that the welfare system itself caused the breakdown of the family. But economic forces, especially declining wages, have played a far greater role



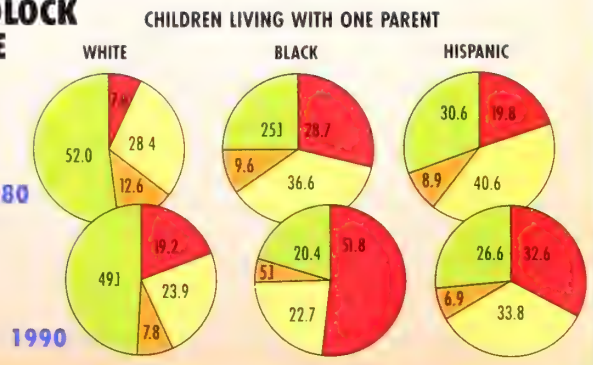
...AS OUT-OF-WEDLOCK BIRTHS BECOME COMMONPLACE

PARENT'S MARITAL STATUS

PERCENT:

- NEVER MARRIED
- MARRIED, SPOUSE ABSENT*
- WIDOWED
- DIVORCED

*INCLUDES SEPARATION





TRIMMING THE DEBT: ARTHUR GOLDBERG AT THE VERTICAL CLUB IN NEW YORK

TURNING THE TABLES AT BALLY

The corporate makeover is inching ahead, but it's not a sure thing

Arthur M. Goldberg has had plenty to worry about since seizing control of Bally Manufacturing Corp. in late 1990. But the other day, as he and four other executives stood by the edge of a pool in one of Bally's Chicago health clubs, he had only one concern: checking out a promising new waterborne exercise machine. As the inventor bobbed, his legs furiously working the prototype contraption and splashing water onto the business-suited executives, Goldberg couldn't contain his enthusiasm: "I can envision these things lined up in a row of 20, each in a different color," he gushed. "Wouldn't it make a spectacular attraction?"

Bally hasn't had much in the way of spectacular lately. When Goldberg ousted longtime Chairman Robert E. Mullane in October, 1990, he inherited an unsteady enterprise groaning under \$1.9 billion in debt, a bloated cost structure, and an uncertain strategy. Over the past 20 months, however, Goldberg has unknotted some of Bally's most vexing problems. And he has quietly put the company in a position to capitalize on the nationwide surge in gaming and on

the continuing health craze. Both major operating units—two New Jersey casinos and 313 health clubs—turned around in the first quarter after operating losses in five of the previous six (chart).

Goldberg, 50, is compensated handsomely for his efforts—\$2.95 million last year, plus a \$1 million annuity. But the rehabilitation has begun to turn heads on Wall Street. Bally's bonds are still rated far below investment grade, but securities that once traded as low as 8¢ on the dollar are now at or near full value. The Chicago company's stock, which bottomed at 1¼ in January, 1991, now trades at around 5.

Bally is still a long way from a sure bet, though. Since Goldberg seized control, the company hasn't made any bond payments. That has caused delinquencies totaling \$110 million, prompting one bondholder group to push Bally's two Nevada casinos into bankruptcy late last year. In

mid-May, BUSINESS WEEK has learned a group of preferred shareholders threatened to exercise its right to install representatives on Bally's board because of the defaults. Although Goldberg has retired \$760 million of debt, Bally still owes \$1.14 billion—a harrowing 74% of capital. Last year, interest expense helped Bally post an operating loss of \$58 million on revenues of \$1.4 billion.

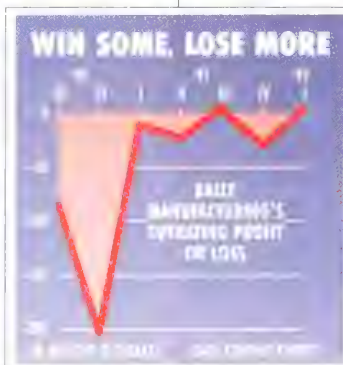
DECK SHUFFLER. Bally's troubles are the product of an era—the debt-crazy 1980s—and Robert Mullane. Famous as a free spender, Mullane counted among his friends New York promoter Steve A. Greenberg, now alleged to have illegally passed along secrets about Bally stock he obtained while working as consultant to the company. Mullane, who has not been implicated in the alleged insider-trading scheme, did not respond to requests for comment. Among his biggest acquisitions were the two Nevada casinos, for which Bally paid \$440 million in 1986. Three years later, paid \$730 million for Atlantic City's Golden Nugget casino, in part to keep hostile suitor Donald Trump at bay. The casinos were sound, but Bally couldn't handle so much debt, and by 1990, it was deep in the red.

In stepped Goldberg, a Somers (N.J.) investor who took over his father's trucking company, Transco Gro Inc., at the age of 26. He sold it two years later and embarked on a career as an investor, buying into industrial companies such as Triangle Industries and International Controls Corp., running them briefly, then moving on.

At Goldberg's first Bally board meeting, the 5.4% owner promptly ousted Mullane. Immediately afterward, he suspended debt payments and quickly sold off two equipment units, raising \$69 million of much needed cash. The money went to retire \$180 million of bonds at just 40¢ on the dollar. He restructured Bally's tapped-out revolving credit line of \$485 million, pledging New Jersey's Park Place casino as collateral. And on June 16, he asked bondholders and preferred shareholders to take Bally stock

instead of \$37 million in interest and dividend payments. Says Jay H. Lustig, vice-president of Drake Capital Securities Inc., a major holder of Bally's bonds and preferred stock: "These people could teach a course in corporate restructuring."

Goldberg has shuffled the deck at Bally's subsidiary operations



WHY PLATINUM LOOKS LIKE GOLD

The specialized software outfit soars by underpricing its rival

Andrew J. "Flip" Filipowski isn't one to brood over setbacks. In March, 1987, after a bitter falling-out with his financial backers and partner over how to turn around DBMS Inc., the software company he had started in 1979, Filipowski was forced out. So he immediately recruited about a dozen key DBMS executives and software developers to launch another startup, Platinum Technology Inc. "It took me about 24 hours to shut that chapter and move on," says Filipowski, 41.

Good move. Platinum, ranked No. 2 company on BUSINESS WEEK's list of the Hot Growth Companies of 1991 (BW—May 25), has seized a leading share of an

price, so Platinum discounted like crazy. And since BMC made all of its sales by phone, Filipowski differentiated telemarketing at Platinum by adding a small direct-sales staff and a global collection of independent computer consultants.

Perhaps his biggest coup was joining up with IBM. To encourage development of DB2 programs, IBM set up an arrangement last year called SystemView. As a member, Filipowski must fork over a stiff 10% of revenues from most of his software packages. In return, he has unparalleled early access to IBM's data-base research efforts. Also, IBM is marketing only Platinum's DB2 tools in Japan.

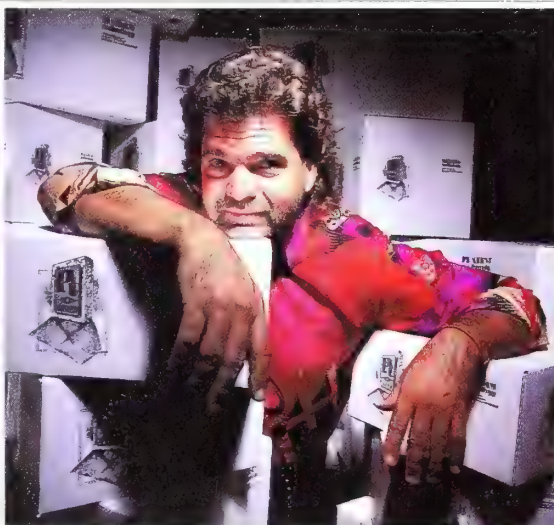
Filipowski's strategy is delivering.

Platinum is neck-and-neck with BMC in these products, each with roughly 35% of total shipments in the \$146 million market, says William S. McNee, a software analyst for market researcher Gartner Group Inc. But Filipowski still has some bugs to work out. "If anything, quality control is really the thing that needs to be hammered in," says Howard D. Buehler, data-base manager for Union Pacific Technologies. Although he has had a few glitches, Buehler figures he saved about \$100,000 by buying five Platinum programs instead of bug-free BMC products. Filipowski knows customers will put up with bugs only for so long. By 1994, he's

shooting for six-sigma, the statistical equivalent of perfection, or just 3.4 defects per million lines of software code.

For the time being, Filipowski's only other worry may be Platinum's stock. It has fallen sharply this year as part of a broad market retreat in technology stocks. But at 14 a share, or about 36 times estimated 1992 earnings, it's still too rich for some. Kemper Technology Fund and Invesco Trust Co.'s technology fund bailed out recently but are awaiting a chance to jump back in. "They've managed their growth beautifully," says Daniel Leonard, a portfolio manager at Invesco. That's not surprising: This time, Filipowski had a lot to prove.

By Lois Therrien in Lombard, Ill.



FILIPOWSKI: A LINK WITH IBM HELPED MAKE PLATINUM TECHNOLOGY NO. 2 ON BW'S HOT GROWTH COMPANY LIST

arcane but burgeoning branch of software products that make it easier to use DB2, the popular IBM mainframe database program. In 1991, Platinum's profits surged 80%, to \$4.5 million, as revenues vaulted 91%, to \$27.9 million. And DBMS? Unable to reverse declining revenues, it was bought in 1990 by Computer Associates International Inc.

GUERRILLA TACTICS. While Filipowski can enjoy the last laugh, his Lombard (Ill.) company was every bit the bootstrap operation until recently. To enter the market for DB2 tools, which perform such functions as moving information between different data bases, he turned to guerrilla tactics. Its big rival, BMC Software Inc., refused to sell below list

When bids for slot-machine maker Gaming International came in well Bally's \$80 million asking price, berg sold a third of the company in initial public offering last November, ng \$38 million. An additional 30% of ing is scheduled for sale soon, even gh the share price has fallen 49% in t weeks. Goldberg also recently k a deal to sell Bally's Reno casino ilton Hotels Corp. for \$83 million. marathon runner who recently be- lifting weights, Goldberg has done e heavy pressing at Bally Health & is Corp., which accounts for around of Bally's revenues. He has closed ral unprofitable clubs and trimmed on a risky expansion. He has also a handle on troublesome unpaid re- bles, and he instituted a new sales mission structure based on reve- , not memberships booked. or all the changes, the board of di- rs is essentially the same one that Mullane's team nearly run Bally und. Some preferred shareholders they may push for a special meeting this year to elect two new board bers. For now, some directors have ical ties to Bally. The law firm of rtor George N. Aronoff, for in- ce, billed Bally for \$3.1 million year.

IDEAS. Goldberg, once a harsh critic ally's salaries and perks, bristles at ion of his own pay. By arranging repurchases with his Wall Street acts, he argues, he has saved Bally e than twice his paycheck. Besides, ays, look at the results: "There's no who can argue the facts and merits hat we've done."

Goldberg isn't even close to finished his plans for Bally. Sometime next , he may launch a real estate invest- t trust to buy more health clubs and e them back to Bally. Goldberg es to kick off a new, standardized ing system for health club opera- s, modeled after McDonald's Corp.'s nburger University. On the casino , Bally is trying to sell its manage- it services to new casinos planned by ous groups nationwide. The company lso bidding to take part in the mega- no project due to be built in New eans.

hose may sound like Mullane-size itions. But the bankers who have n essential in financing Bally's corpo e makeover seem sanguine about dberg, who they claim is more cau- s than his predecessor. "Is he going et overextended and get Bally back trouble?" says one of the company's l bankers. "No. It ain't going to hap- ." Considering the way Bally has ted its bondholders, he had better e not.

By David Greising in Chicago

REC

FASTER

CONNECT

Introducing FASTAR.SM FAST Automatic Restoration. The nearly perfect solution for maintaining the reliability of your 800 service in an imperfect world.

When your business depends on 800 service and your lines are down even for a minute, that's a minute that you're out of business. That's why AT&T has invented and is implementing FASTAR technology, to safeguard you from service interruptions.

If an accident does happen, we'll reconnect you with your customers more quickly than ever before. So fast, that your service can now be restored within minutes rather than hours.

FASTAR is an exclusive AT&T Network program that when fully deployed in September 1992 will

continuously protect nearly 95% of all AT&T traffic every second of every day, 365 days a year. If, for example, there's a cable cut in our backbone Network, FASTAR automatically identifies the problem, designs a solution, and begins to implement a rerouting plan within minutes. In fact, FASTAR enables the AT&T Network to heal itself. Best of all, AT&T 800 Service customers are automatically covered by FASTAR.

So if your company can't afford to be without its 800 service, your company can't afford to be without AT&T.

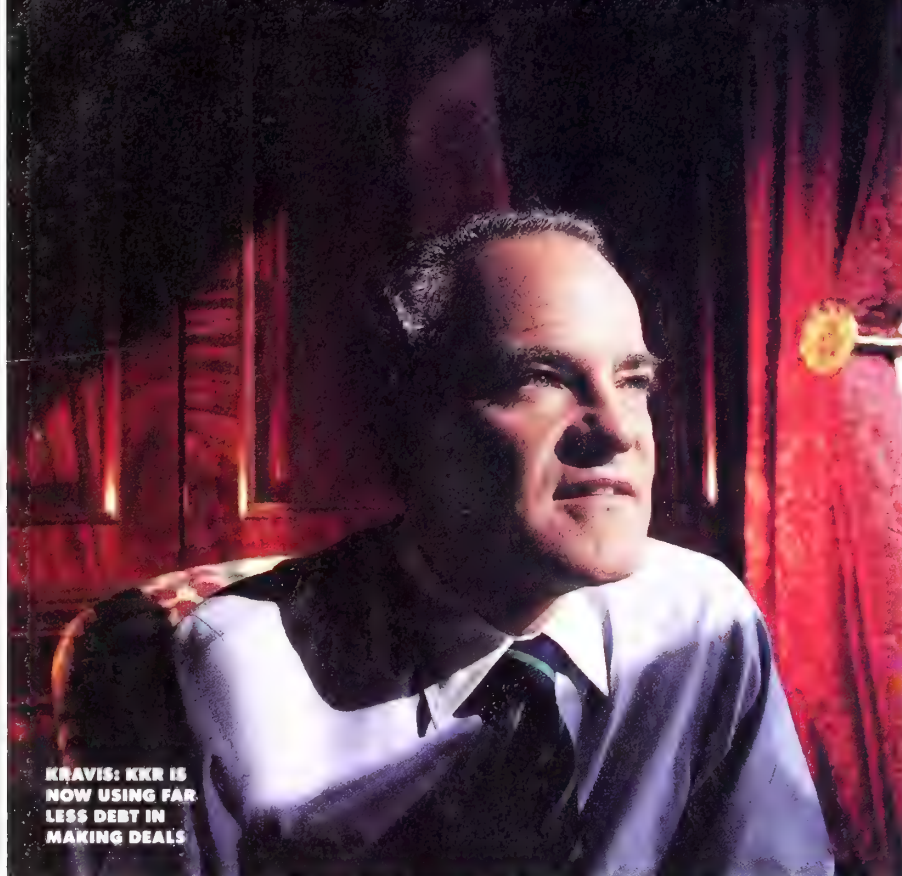


AT&T

The right choice.

KKR PLAYS A SLOWER GAME

But new strategies are breaking fresh ground



KRAVIS: KKR IS NOW USING FAR LESS DEBT IN MAKING DEALS

Last October, Ronald E. Compton, the chairman of Aetna Life & Casualty Co., sat down for dinner at New York's Plaza Hotel with Henry Kravis and George R. Roberts, who run Kohlberg Kravis Roberts & Co. Compton wanted to sell the Hartford insurance giant's American Re-Insurance Co. to KKR, a deal the two companies' staff had been discussing for four months. During the dinner, both sides agreed to go forward. But it took eight months before the two sides announced the \$1.2 billion deal this June.

For KKR, a year is an eternity. It took the firm just a few months to wrap up such 1980s megadeals as Duracell Inc. and RJR Nabisco Inc., the sort of consumer-products companies KKR special-

ized in acquiring. And in contrast to the busy pace of a decade ago, AmRe was KKR's first major buyout in two years. "We have to dig deeper to find the opportunities," says Kravis. "It's not as easy today as it was in the '80s. We have to be a little more creative."

So KKR is doing a lot more digging—and coming up with a lot less. With the days of easy credit and a plethora of woefully underleveraged targets long gone, KKR is changing its strategy. Although it hasn't abandoned leverage, it is using far less debt and focusing on out-of-favor industries such as financial services, publishing, cable television, radio, and resort properties.

For many of its deals, KKR is using a technique it calls a "leveraged buildup."

KKR has recruited an entrepreneurial manager for each of several industries. With KKR's financial backing, these managers seek to create a large company by acquiring a number of small ones. The industries KKR has selected tend to be fragmented, where there are many good properties not yet owned by giants. "The old LBO formula doesn't exist. So they had to do something very different," says William F. Reilly, the CEO of KKR Communications Corp., KKR's partner in the publishing industry. Joseph R. president of Clayton Dubilier & Rice, a New York buyout firm, puts it more directly: "They are trying to compensate for their inability to come up with critical mass in a single stroke."

'STILL IN BUSINESS.' While these strategies have strong merits, KKR may have to settle for being less visible, less profitable, and less popular with investors than it was in the 1980s. In contrast to LBOs, buildups may take years and may yield lower profits. Kravis and Roberts, though, believe buildups hold the same potential for controlling assets as LBOs. "We've got the experience, the capital, and the credentials. We've come through some pretty tough times and we'll compare our record to anybody's," says Roberts.

It's hard to fault KKR's 1980s performance. By its own reckoning, the annual compound rates of return to its investors after KKR's 4%-to-5% cut were 34.3% for the 1984 fund, 28.1% for the 1987 fund, and 24.1% for the 1987 fund, which were hurt by the bankruptcy of Seagram Furniture Co. and Walter Industries Inc.

KKR spent most of last year unwinding deals. It took six of its companies public, including RJR Nabisco and Duracell. Tightening the equity market perfectly, KKR raised \$6 billion in new equity last year, some 10% of 1991's equity offerings. The result is a portfolio of companies with far healthier balance sheets. The deleveraging also reduced KKR's position in its companies. But the firm is still a large or controlling shareholder in some \$45 billion worth of companies. It currently has some \$2.8 billion to spend, including \$1.8 billion it just raised for a new fund.

KKR admits, though, that it will not be able to match 1980s returns. So far, its new strategies have had mixed results.

Financial services have been the firm's most extensive foray, with a move into banking a big success. A

**KKR'S
INDUSTRIAL
TARGETS**

INDUSTRY

**ACQUISITION
VEHICLE**

**EQUITY COMMITMENT
MILLIONS OF DOLLARS**

ago, before bank
s had turned
id, KKR teamed up
Fleet/Norstar Fi-
al Group Inc. to
he failed Bank of
England from the
ral Deposit Insur-
Corp. Its paper
after a year is
\$255 million on a
million investment.
CEO Terrence
ay says that Fleet
make a new ac-
tion by the third
fourth quarter.
re's no reason why
ould not do anoth-
eal," with KKR, he

insurance, while it
be more hazardous, appeals to KKR
ise it is so arcane, thanks to cryptic
cial statements and layers of regu-
l. It is also at a cyclical low. Buying
e cheap now could mean big profits
emium income picks up. Leverage
l magnify those returns.
e problem is that clients and regula-
may be uneasy about KKR's use of
age. AmRe is the largest LBO the
stry has ever seen. It has an espe-
jittery client base—other insurance
panies, who use reinsurers to lay off
n of their risk. To insurers, cre-
orthiness is crucial. They need to
ve AmRe will be around during the
ears or so that reinsurance contracts
mpass. "People are much more com-
ble with insurance companies that
t have an LBO structure," says Wil-
Cavanagh, a Standard & Poor's
analyst.

THE RUN. KKR has structured the deal
ssuance companies that deal with
Re. The key element is Aetna's
ement to put up as much as \$500
on to cover AmRe losses on cover-
written before Jan. 1, 1992.
at that hasn't pacified ratings agen-
S&P has placed AmRe's AA+ rat-
on credit watch on the grounds that
ings that would have been retained
uild up AmRe's capital structure will
be used to service debt. AmRe,



ROBERTS: WITH ITS "LEVERAGED BUILDUP" TACTIC, KKR IS ASSEMBLING COMPANIES

which has had no debt, will now have a
debt-to-equity ratio of 2.7 to 1. "That
may be low for an LBO, but that's not
low for an insurance company. And
that's not low for an investment grade
rating," says S&P's Cavanagh. KKR part-
ner Saul Fox says that AmRe has al-
ready met with its major customers, and
"after we explained it, they felt
comfortable."

With LBOs so few and far between,
KKR is betting on its buildup strategy.
So far, results have been unremarkable.
The firm seems to have hit a home run
in publishing. In just 30 months, K-III
made 13 acquisitions, including eight
consumer magazines—among them *New
York* and *Seventeen*—from Rupert Mur-
doch for \$650 million. Starting with a
staff of three, it now employs 3,000 and
has \$800 million in sales with plans to
grow to \$2 billion. Largely through cost
savings, CEO Reilly boosted earnings 7%
in 1991, an unusually hard year in the
magazine business. KKR owns 87% of the
company's \$500 million in equity, with
some 164 managers owning the rest.

Yet the opportunities offered in pub-
lishing were unusual. In cable television,
KKR chose Alan Gerry, chairman of Cab-
levision Industries Corp., a major cable
operator, as its partner. But as soon as
KKR announced its intention to buy \$1
billion in cable properties in June, 1991,

other big investors
jumped in with the
same idea. So far, KKR
has announced just one
\$132 million purchase,
which is still pending.

In radio, KKR formed
Granum Communica-
tions Co. in 1991 with a
radio veteran, Herbert
McCord (page 58), and
so far has bought just
four radio stations.
Since then, regulatory
changes have made
competition for radio
stations fierce.

KKR is still pushing
ahead with ventures in
other areas. In March,
1992, it signed on two
former Vail Associates

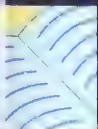
Inc. executives to buy resort properties,
such as skiing and golf, and possibly
hotels. The firm is looking for a partner
in the oil and gas industry.

HIGH FEES. While buildups, being less le-
veraged, have less financial risk, they
are tougher to manage than LBOs, says
K-III's Reilly. Finding good managers is
tough. "We couldn't have built the com-
pany without Macmillan's farm team,"
says Reilly, who has hired 50 managers
from Macmillan Publishing Co.

And raising money is getting harder.
Some of KKR's longtime investors chose
not to invest in its most recent fund. At
issue is the firm's high fees. They be-
lieve KKR gets too big a slice of the
profits. "Other LBO funds are negotiat-
ing and changing. They threw it on the
table and said, that's it," says Robert
Zobel, investment director of the State
of Wisconsin Investment Board and a
KKR investor who passed on KKR's latest
fund.

But even Zobel admits it's a mistake
to underestimate KKR: "I think they are
a very powerful firm. Their power is in
their creativity." Making big returns
during the slow-growth 1990s won't be
easy. But with its demonstrated record
of breaking new ground in dealmaking,
KKR just may find a way.

By Leah Nathans Spiro in New York,
with Geoffrey Smith in Boston

					
SHIPPING	CABLE TELEVISION	RADIO	RESORTS & LODGING	BANKING	INSURANCE
K-III	CABLEVISION	GRANUM COMMUNICATIONS	KSL ENTERPRISES	FLEET/NORSTAR	AMERICAN RE
50	\$215	\$45	KKR IS COVERING EXPENSES TO FIND PROPERTIES		\$300
DATA: KOHLBERG KRAVIS ROBERTS & CO.					

DRUG STOCKS: THE ROUT IS FAR FROM OVER

Even the Mercks and Pfizers won't easily make gains this year

Until a few weeks ago, drug analyst Joyce M. Albers at First Boston Corp. had been praising Bristol-Myers Squibb Co., urging clients to buy. The reasoning was simple. New products drive the drug business, and over the last several months, the world's second-largest pharmaceutical company introduced five of them, including a cholesterol fighter and a promising AIDS treatment. Given the impressive lineup, she says, "this should have been a very respectable year for the company."

It's not turning out that way. First-quarter earnings fell shy of expectations, but company officials assured Wall Street they would make it up in the second. Then, in early June, the bombshell hit. The company said second-quarter sales were weak, too, suggesting earnings may this time fall more than a little short. Bristol shares plunged nearly 7 points, and Albers and other analysts yanked their recommendations. Before the massacre stopped, the stock had dropped almost 15%, and many other drug stocks were also dumped.

'MUDDY BOTTOM.' Now, investors are often reminded that drug stocks can get sick, too. On June 17, Upjohn Co. said its second-quarter profits would show no gain over 1991—and the stock dropped 5.2%. "For the first time in 10 years, drug companies are suffering from fundamental earnings disappointments," says Michael K. Arends, who co-manages two growth mutual funds for Kemper Financial Services Inc. There's also other bad news casting a pall over the stocks. Days after Bristol's stunner, Abbott Laboratories withdrew Omnidex, a new antibiotic, from the market after it was linked to three deaths.

Investors didn't get too upset when drug stocks started to decline in early

1992 (table). But until a few weeks ago, most analysts took the drug slump to be temporary. Now, few expect a quick rebound. "It's hard to see how they're going to beat the S&P 500 this year," says Neil B. Sweig of Capital Institutional Services Inc. "They'll creep along the market's muddy bottom."

Investors have been unnerved by the drug stocks because the companies have for so long delivered steady double-digit earnings gains. That made the stocks golden. From 1989 through 1991, the drug stocks in the Standard & Poor's 500-stock index soared 162%, vs. 50% for the broad index. Big companies such as Merck and Bristol-Myers Squibb doubled, and Pfizer even tripled in price.

Now, however, the drugs are so beaten down that even those who buy stocks for yield are sniffing around. Take Roger Newell, who runs the Vanguard Equity-Income Fund. Newell says that based on their yields relative to other stocks,

Bristol-Myers, with a yield of 4.3%, and Upjohn, at 4.2%, are about as cheap they've ever been, and, like nearly all big drug stocks, they are high on cash and low on debt. But he's still buying cautiously. James H. Gipson of Pacific Financial Research Inc., is also taking soundings but is not ready to buy. "They look awfully cheap by their past growth rates," says Gipson. "But the industry fundamentals are changing."

The principal engine for drug company growth is still new products. Even the big earnings gains of recent years didn't come from innovation alone. The good chunk came from price hikes that ran as high as three times the rate of inflation.

But the days of soaring drug prices may be over. Government and private industry, trying to rein in health care costs, are pressuring the drug companies as well as doctors and hospitals to keep prices in check. In fact, industry leader Merck & Co. has promised to keep increases in line with the consumer price index. Analyst Marc O. Mayer of Sanford C. Bernstein & Co. says the industry's earnings growth rate could improve in 1993, but it may never again equal last year's 18%.

FEW GAINS. The only way to win the drug-stock game is find those with the best "product pipelines." On that count, Merck and Pfizer Inc. are considered tops. Merck's prize new drug, Proscar,

which treats benign enlargement of the prostate, is expected to get FDA approval later this year. Pfizer has new antidepressant and cardiovascular drugs in the works. Their stocks show it. They have declined the least, and their price-earnings ratios are still the highest and yields the lowest in their industry.

Even the Mercks and Pfizers may have trouble making gains. Institutions are neck-deep in drugs—not one company is less than 50% owned by pros—and they'll be looking to sell, especially by the end of the second quarter but perhaps a year. "No doubt drug stocks will be great opportunities," says Mayer. "But we're not there yet."

By Jeffrey M. Laderman in New York

A ROSTER OF THE BATTERED AND THE BRUISED

Stock	Price	1992 percent change	P-E ratio*	Yield
BRISTOL-MYERS SQUIBB	\$64.50	-26.9%	14.4	4.3%
GLAXO HOLDINGS	25.75	-31.8	21.1	2.9
ELI LILLY	64.625	-22.6	12.6	3.4
MERCK	47.25	-14.9	21.9	1.9
PFIZER	67.625	-19.5	21.1	2.2
SYNTEX	34.50	-28.5	15.7	3.0
UPJOHN	32.25	-21.3	10.0	4.2
WARNER-LAMBERT	60.00	-22.7	12.6	3.4

*Based on expected earnings for year ending Dec. 31, 1992, except for Syntex with fiscal year ending July 31, 1992

DATA: BRIDGE INFORMATION SYSTEMS INC., ZACKS INVESTMENT RESEARCH

COLOR-BLIND CREDIT: HOW THE BANKS CAN DO BETTER

Fifteen years ago, Senator William Proxmire had a simple idea: The Wisconsin Democrat reasoned banks and thrifts, granted charters to collect federally insured deposits, had an obligation to return a significant portion of those funds to their neighbors in the form of loans. That blossomed into the Community Reinvestment Act of 1977.

It gave regulators the power to block a bank's requests to expand or merge, unless the institution can show that it has tried to meet the credit needs of all constituencies—rich and poor, black, brown, and white—in its service area.

Unfortunately, CRA has become a far-from-simple regulatory mess that satisfies no one. While more than 90% of all banks win "satisfactory" or "outstanding" ratings from regulators on CRA examinations, it's clear from available data that CRA has been far from successful in wiping out "redlining" of poor or minority neighborhoods or racial discrimination in lending.

Federal Reserve data on mortgages show that a low- to moderate-income white applicant had a better chance of getting a loan in 1990 than even a high-income black (table). And while regulators don't gather comparable data on business lending, the Los Angeles riots showed that lack of credit is a major barrier to business growth in minority neighborhoods.

FILES. The wide gap between banks' efforts to comply with CRA and actual achievements stems from the law's basic weakness. Proxmire was, quite rightly, leery of giving regulators the power to dictate how much, where, and to whom banks should lend. So the CRA superstructure built over the years relies on paperwork, not results. Banks churn out fat reports that document their contacts with community groups, marketing to various populations, directors' involvement in passing CRA resolutions—everything, that is, except the extent to which they actually make loans available.

How can CRA be fixed? Given the sheer size and diversity of the banking

industry and regulators' preference for cookie-cutter rules, it's best not to try to design a nationwide system of CRA credit standards. Instead, regulators should use their present tools to turn up the heat on institutions that don't meet their local customers' needs.

The first step is gathering accurate information. Regulators still don't

ing programs to direct evidence of discrimination. But critics complain that these reports are long on rhetoric and short on hard data. "Now, the CRA report is written to justify the examiner's conclusion—not to provide data we can compare from bank to bank," complains Allen Fishbein of the Washington-based Center for Community Change.

BASIC CHOICE. Regulators should also consider tougher sanctions. They should be more aggressive in using the leverage CRA allows over banks seeking expansion. Even with high CRA ratings, NationsBank Corp. and BankAmerica Corp. agreed to plow more than \$20 billion into community-based lending to facilitate their respective mergers. For smaller banks that don't plan to expand, regulators may need new powers—including fines—to force compliance.

Banks, of course, aren't the only parties to blame. Mortgage lending can be stymied by discrimination by insurers and appraisers. Housing agencies such as the Housing & Urban Development Dept. need to direct research to identify those factors and expose them to

public pressure. The secondary market for mortgages is also crucial. While the Federal National Mortgage Assn. is well on its way to meeting its goal of \$10 billion in "community-based" loans, Fannie Mae should also be required to put some of the vast profits it earns under its government charter into subsidies for low-income borrowers.

In the final analysis, though, only a direct commitment by banks to a fair, color-blind system of credit will make CRA live up to Proxmire's high hopes. And that means banks have a fundamental choice: They can create that system themselves, or they can wait until public anger forces Washington to impose it on them.



know whether lending patterns are being driven by racial prejudice or legitimate economic factors such as credit ratings, so it's impossible to tailor an enforcement effort. There have been some moves in the right direction. For example, the Boston Fed is asking 132 banks for details on applicants' credit and employment histories to determine whether high minority rejection rates in the 1990 mortgage data were based on economic or racial factors.

The regulators should then focus on improving CRA examinations. A 1989 amendment to the law required regulators to rate banks in 12 areas, ranging from participation in government-backed lend-

BIASED LENDING?

Income category	Mortgage approval rates*	
	Whites	Blacks
LOW TO MODERATE	69%	51%
LOWER MIDDLE	78	61
UPPER MIDDLE	80	64
HIGH	81	66
ALL GROUPS	76	56

*Percentage of conventional home-purchase mortgages approved in 1990

DATA: FEDERAL RESERVE

BY GENE G. MARCIAL

JUST WHAT THE DOCTOR ORDERED AT HEALTHDYNE?

The market is littered with the shares of wounded health care companies, some of which have fallen as much as 80% this year. Among the few that have escaped with relatively minor injuries is Healthdyne, a major provider of home medical-care services. The stock tripled to about 30 a share since being mentioned in this space a couple of years ago, but the sell-off in the health group pulled it down from its January high to 18 $\frac{3}{4}$. Yet several big investors recently have been buying in.

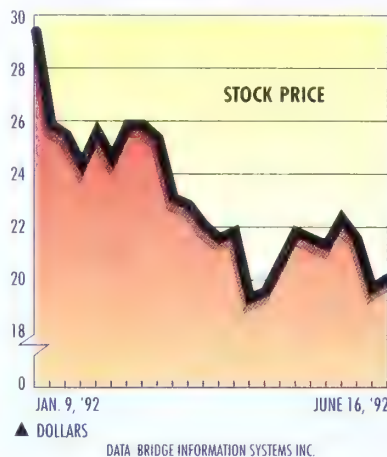
The reason: They believe that management is apt to make a move soon that will kick the stock up. In 1989, the company sold 33% of its Home Nutritional Services unit, currently trading at around 19 a share. Now the betting is that Chairman and CEO Parker Petit will take public Healthdyne's two other units—the perinatal services division, which provides obstetrical home-care services for high-risk pregnancies, and the technologies unit, which makes equipment for monitoring and treating sleep and respiratory disorders.

One big investor says Petit is waiting for the "right time" this year to offer the public 25% to 35% of these two highly profitable divisions. The move would produce a market value for them. Taking them public would also be a defensive move against a possible takeover. The value of Healthdyne's pieces, says the investor, is much higher than what the stock is selling for, which makes the company very attractive to companies hunting for acquisitions in the medical field.

BEST GAINER. Analyst Jane Gilday of Tucker Anthony agrees. She estimates that Healthdyne's 67% stake in Home Nutritional Services is worth \$9 a share in Healthdyne stock. And the perinatal division, Healthdyne's best gainer, with operating profits zooming by 464% in the first quarter, is worth \$16, while the technologies division is worth \$6 a share. In sum, the parts have a combined value of \$31 a share, she figures. Gilday's target for the stock over the next 12 to 18 months is 35 to 40.

Petit, who owns 15% of the stock, says he's always looking for ways to boost shareholder value. But he won't

HEALTHDYNE: READY FOR A TRANSFUSION



comment about the possible public offering. Healthdyne is now taking advantage of opportunities in Europe, where demand for the company's kinds of services is growing, Petit says. The foreign market now accounts for just 10% of sales, and Healthdyne has formed a joint venture with a company in the Netherlands. Petit says analysts' estimates of \$1.20 a share for this year and \$1.80 next year don't include the growth he sees in Europe.

SCOTT PAPER MAY BE READY TO ROLL

Most investors think Scott Paper belongs in the doghouse. But money manager Elizabeth Vale of CoreStates Investment Advisers, which manages some \$8 billion, disagrees. She has been snapping up shares because she believes this maker of toilet tissue as well as printing and book paper has hit bottom in both its stock price and earnings.

True, Scott was a big loser in 1990, when it fell 21%, and again in 1991, when it slid 8%. And although Scott joined the paper group and other cyclicals when they rallied earlier this year, the stock is back in the cellar, down to 39 a share from 46 in mid-April.

Based on the turnaround she sees, Vale figures Scott is well worth 55 to 60 a share. The stock's recent decline was due to the drop in coated-paper prices. Coated paper is important to Scott because its S. D. Warren coated-paper unit is expected to account for about 25% of 1992 earnings. Some paper analysts, however, believe coated-paper prices are bound to recover soon,

noting that prices have already declined some 20% this year. "This is below the expected bottom for coated paper and should be near the low," says Vale. She sees no new capacity coming on stream anytime soon.

The weak demand for paper, caused in part by low advertising volume, is expected to improve as the economy rebounds. The election, plus the summer Olympics, should spur ad demand and Vale believes paper prices will also rise as the economy improves. Procter & Gamble has already hiked prices for consumer paper products this year, she notes. She expects Scott to earn \$2.60 a share this year and \$3.75 next year, up from last year's \$1.54.

U.S. SHOE MAY HAVE FOUND A GOOD FIT

A big disappointment on Wall Street, U.S. Shoe may yet pull a surprise. "Practically every one on the Street has given up on U.S. Shoe," says money manager Bob Buckman, who has traded in and out of the stock as it seesawed from 11 a share in December to 18 in March, then down to 12 in recent days. Buckman, a partner at Brandywine Asset Management, has been buying shares again, convinced that they will hit 20 in the next 12 months.

Buckman is betting that management will be able to boost sales at its LensCrafters division, which specializes in fast-service eyeglass retailing. The company, which operates nearly 300 LensCrafters stores, has put pilot stores inside Kmart outlets in some cities to test the public's response to LensCrafters' discount optical products. If the response is good, U.S. Shoe plans to put up such "Sight & Save" discount stores in about 100 Kmart stores, says Buckman.

"That will create a dramatic impact on U.S. Shoe's bottom line," figures Buckman. He says the plan is to raise LensCrafters' earnings contribution to 50% from 18%. Women's apparel accounts for 49% of revenues and 61% of earnings. Shoes now account for 27% of revenues and 21% of earnings. "Shoes are still profitable, but there has been no growth," he says.

Buckman speculates that management will sell its shoe division once LensCrafters "gets rolling." Buckman thinks the company will earn \$1.50 a share in 1993 and \$2 in 1994, vs. 95¢ this year and 1991's \$1.20.

He hasn't missed a day of work in ten years. Without insurance, he can't afford to get sick.

He's a hard-working middle-class American. Yet his family lives on the brink of disaster every day, simply because his employer is too small for a group health plan. And an individually purchased health insurance policy for his family would cost nearly \$500 a month. About a fourth of his take-home pay.

He's not alone. Today, millions of working people and their families are forced to live without health insurance because of its cost.

The 300,000 member physicians of the American Medical Association think this is wrong. We believe no person should be denied access to our health care system. Health insurance must be provided to

everyone in the work force, regardless of their income or the size of the company they work for. And this coverage must be continued even if a worker changes jobs.

Most people in this country *do* receive high quality health care. But the system *must* be improved. And we have a proposal, called Health Access America, that will reduce costs while preserving the quality of our system and individual freedom of choice.

Employee health insurance is just one of the points in this proposal. If you would like to learn more about Health Access America, write Dr. Jim Todd, Dept. 407, American Medical Association, 515 North State Street, Chicago, IL 60610, or call us today at 800 621-8335.

American Medical Association

Physicians dedicated to the health of America



FOR EVERY YOU, THERE'S A FUJITSU.



Cellular technology.

When you feel like
showing off, it's the
perfect status symbol.

When you're chasing a
new client, it's the
ultimate necessity. And
no portable cellular
phone makes staying in
touch as convenient as
the Pocket Commander
Stylus™ from Fujitsu.

With available
accessories such as



a hands-free car kit,
3-watt power booster,
Pocket Data Interface,
rapid charger and
the innovative Power
Pack Plus alkaline
battery pack, you
can always be on
call. For the pocket
cellular phone that's
sure to breed success,
look to Fujitsu.
For every you,
there's a Fujitsu.



1 - 8 0 0 - 9 5 5 - 9 9 2 6

FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

Pocket Commander Stylus™ is a trademark of Fujitsu. Fujitsu, Fujitsu logo, and Fujitsu Stylus are trademarks of Fujitsu Limited.

Developments to Watch

BY FLEUR TEMPLETON

WHAT IS PLAYING WITH A NEW STACK OF CHIPS



Instead of a circuit board in your next computer, look for a package the size of a sugar cube. On June 15, IBM inked an agreement to commercialize Irvine Sensors Corp.'s innovative packaging, which stacks more than 100 integrated circuits into a half-inch-high cube. Earlier this year, the tiny Costa Mesa (Calif.) company used its "cubing" technology to stack 80 memo-

ries to replace a PC's 40-megabyte hard-disk drive. Such unusual packaging is needed to reduce a data processing bottleneck—the distance between chips on a circuit board. Irvine Sensors has spent 12 years and \$30 million perfecting the cube for military and satellite uses. While IBM cuts manufacturing costs, Irvine Sensors will develop a scaled-down cube for conventional packages, so computer makers can retrofit today's designs with extra memory. The technique will also work for credit-card-size memory technology recently introduced by American Telephone & Telegraph Co. and Intel Corp. to replace hard-disk drives.

INDUSTRIAL CLEANER THAT WON'T EAT THE OZONE

To your everyday beachgoer, snow doesn't come to mind in the quest for sunburn and skin-cancer protection. But scientists at Research Triangle Institute in North Carolina, have developed a special carbon dioxide "snow" that may help slow thinning of the earth's ozone layer. This snow will replace ozone-depleting chlorofluorocarbons, or CFCs, which are currently used as solvents to clean microelectronic, aerospace, optical equipment. Such industrial cleaning accounts for 10 percent of all CFCs used worldwide. Computer chips and other surfaces sprayed with the CO₂ snow appear to be as free from dust as those treated with the solvent, says Liz Hill, an RTI chemical engineer. Furthermore, Hill says, the cost is comparable to treatment with CFCs, which must be phased out in the U.S. by 1995. Trying to solve the ozone problem with CO₂, a contributor to global warming, troubles some environmentalists. But RTI scientists say it will be no net increase in gaseous emissions since they carbon dioxide that has already been created as a byproduct of other industrial processes.

WHAT'S NO FRUIT FLY, THAT'S A VACCINE FACTORY

Long used in genetic research, fruit flies may soon help fight AIDS, hepatitis C, and cancer. Researchers at San Diego's Scripps Research Institute and Cytel Corp. in La Jolla, Calif., use the insects as factories to produce vaccines that stimulate immune responses in patients afflicted with chronic diseases. The problem is that these people's white blood cells do not recognize and destroy diseased cells.

The researchers insert a gene into the flies, causing them to churn out special receptors that play a role in the human immune system. The scientists add virus or tumor cells to a test tube containing the extracted receptors, which, like settings for diamonds, lock onto portions of virus or tumor molecules. Then they incubate the mixture with a patient's white blood cells. After a few weeks of exposure to the virus-filled receptors, white blood cells will be charged up—and recognize and kill infected cells when injected back into the patient.

So far, the so-called *ex vivo* vaccines have succeeded in fighting tumors in mice. The company says human clinical trials for AIDS or melanoma are planned for early 1993.

CAN THESE NEW MATERIALS SOP UP RADIOACTIVE WASTE?

Cleaning the mess left over after the world's atomic-weapons binge is a slow process. But chemists have developed a new class of inorganic materials, called silico-titanates, that can help dispose of radioactive wastes. They can separate the highly radioactive material out of "radwaste" solutions, greatly reducing the volume that must be encapsulated in glass or ceramic for long-term disposal.

In tests on cesium 137, scientists at Texas A&M University and Sandia National Laboratories in Albuquerque found that silico-titanates are up to 60 times more efficient than materials currently used to immobilize high-level radwaste. The crystalline structure of the new material is chemically designed to be highly reactive with cesium ions, trapping them between layers of titanate.

Silico-titanates have also successfully trapped strontium 90, another radioactive isotope. Within two to three years, scientists hope to be able to extract all radioactive contaminants from weapons-production waste. The titanate material may also be useful in treating low-level radioactive waste, industrial chemicals such as nickel, and even groundwater.

GLASS STITCHES TO MEND BROKEN BONES

Glass bones seem about as practical as feet of clay. But researchers at the University of Dayton in Ohio say that glass fibers may soon replace metal pins in setting severely broken limbs. Currently, the patient undergoes a second operation to remove the metal pins. However, when special glass fiber implants are used, the body resorbs the glass as the bone mends.



Unlike ordinary glass, these fibers contain a blend of calcium, phosphorous, and tiny amounts of iron oxides. The combination makes the glass as strong as metal, yet allows the material to dissolve over time. Because they contain elements found in bone, the implants may even speed the recovery process by supplying calcium to the healing bone.

Preliminary studies suggest that the material is nontoxic, says Dayton researcher Binod Kumar. Glass fiber implants, he adds, should be cheaper than metal pins. Animal studies are under way, and human trials may start in about five years.

ON A CLEAR DAY YOU CAN SEE PROGRESS

American R&D is still plodding, but some companies are getting more bang for the buck

In the early 1960s, when he was John F. Kennedy's science adviser, Jerome B. Wiesner was asked to speak at a steelmakers' convention on the state of the industry's research. To get up to speed, Wiesner assigned aides to study the subject. They were shocked to find that steelmakers were not developing new technologies or even adopting the improvements made by Japanese and European competitors. "I don't know why you asked me to speak about research," Wiesner told the group. "You're not doing any. And if you don't change, you'll be out of business in 20 years." Outraged steelmakers wired the President to complain, a response that seems laughable today: They have been trounced by overseas rivals for decades and are only now getting up to speed.

Alarmed by rising foreign competition in a broad array of technologies—from computers and telecommunications to autos and aerospace—experts from government, industry, and academe sound more and more like Wiesner preaching to the steel industry. At first glance, BUSINESS WEEK's annual survey of research and development spending for 1991 will do little to ease their fears. Rocked by recession and global competition, Corporate America is in one of the worst research crunches since BW's annual survey began in 1975.

American corporations spent \$74 billion on R&D in 1991—up 6.8% from the previous year. But that's a timid 3% increase when adjusted for inflation, the worst two-year performance since 1985-86 (chart).

Despite such numbers, however, there

are encouraging signs that at least some companies and industries don't share the complacency that once plagued American steelmakers. For instance, R&D spending rose last year even though corporate profits plunged 31%. Apparent lackluster research outlays also ma-

some positive trend. Over the past few years, many companies have focused their R&D more carefully to get bigger bang for the dollar. And the U.S. still spends far more than any other country on such work. "The system is more robust than people think," says John A. Armstrong, IBM's vice-president for science and technology. **BOEING BOOST.** There are some caveats to the view. A rosier outlook rests partly on the belief that the recession largely over. Even the hardy anyone sees a return to the heady early 1980s, when the defense rush drove real R&D spending to double-digit levels. Today, there's just too much pressure to rein in costs. That's why the rate of R&D growth in real terms should be about the same this year—with significant turn upward not coming until 1993, says Jules J. Duga, senior R&D policy analyst for Battelle, the research and consulting institute in Columbus, Ohio. It's also one reason why many experts—including Wiesner, now president emeritus of Massachusetts Institute of Technology—argue that



ngton must fashion a new technology policy closely tied to industry's in order for the U.S. to regain of its competitive luster. That mean stripping money from de- and plowing it into generic tech- es such as automation, manufac- , and materials research. ight take this kind of national di- to trigger a turnaround broad h to end the ambivalence reflected latest R&D numbers. For 1991, con- rates had the dubious honor of be- only industry to show a spending se. Their outlays fell 3%, thanks -point drops at both General Elec- , and ITT Corp. The chemicals in- came in flat compared with 1990. drop at Du Pont Co. depressed the l numbers and knocked the compa- No. 7 to No. 10 among the top enders. Du Pont says the decline aused by its decision to funnel its aceutical R&D into a new joint ven- ith Merck & Co.—and that other- its R&D spending actually rose by 6%. Aerospace, withering under e cuts, nonetheless mustered a 6%. But nearly all this came from g Co.: As it geared up for its new tliner, the Seattle company hiked eadly 71%. Among other industry ents, normally strong computer s also showed the effects of reces- nd competition, raising spending a re 3%. IBM weighed things down: ue reversed 1990's 6% decline but ged only a modest 2% rise. the upside, health care, dependent ug and biotechnology companies ust see a string of new products gh costly trials, posted a healthy ise, the largest of any group. The guered auto industry somehow ts spending a point ahead of the

industry composite, pushing R&D up 8% after only a 5% hike the year before. General Motors Corp., the nation's perennial big spender, laid out 10% more despite a net loss of \$5.9 billion. Part of the figure reflects spending at its Hughes Aircraft Div., and part was to meet new federal requirements for better environmental controls for manufacturing plants. Telecommunications, last year's laggard, turned things around and hiked spending 6% in 1991. The difference: American Telephone & Telegraph Co., which accounts for 83% of industry outlays. AT&T raised its budget 6%, after an 8% cut the year before. The company attributes the rise to new work in computers and advanced communications.

That sectors such as autos and telecommunications managed to rebound after taking hits in 1990 highlights the cautious optimism that's emerging as companies plan next year's R&D budgets. Behind this mood is the belief that the diet of austerity and quality consciousness that U.S. corporations have endured over the past few years is paying off. For example, despite net losses of \$7.5 billion last year, Detroit auto makers—which have made gains in reliability, manufacturing, and design—are beginning to win back market share from Japanese rivals. "We intend to capitalize on every opportunity out there," says Ford Motor Co. Chairman Harold A. "Red" Poling.



**MANY COMPANIES
ARE CONCENTRATING
ON IMPROVING
CURRENT PRODUCTS
RATHER THAN FUNDING
IFFY NEW VENTURES**

The emphasis on efficiency is having a broad impact on every pursuit from marketing to production to R&D. Companies have slashed research projects outside core areas. They have shortened the time for product development by bringing researchers, developers, and marketing staffs together at the onset of a project to try to do things right the first time and avoid costly fixes later. And stung by Japan's success at improving existing technologies, they often have moved to smaller-scale R&D projects aimed at im-

proving current products rather than pouring money into iffy new ventures. The result is a shattering of the almost sacred adage that more R&D is better R&D. "To use resources more effectively—that's the challenge we have," sums up IBM's Armstrong.

RECORD TIME. Competitiveness gurus like the idea, but not always the results. They warn that too much attention is focused on the "D" side of R&D, to the detriment of the basic research that gave the U.S. its edge in the first place. "All the incentives in the current managerial environment are biasing managers toward incremental improvement," laments Joseph G. Morone, director of the Center for Science & Technology Policy at Rensselaer Polytechnic Institute. Indeed, companies often view their choice as either research or development, concedes John S. Mayo, president of AT&T's Bell Laboratories. The legend-



THE RESEARCH AND DEVELOPMENT ELITE

BY TOTAL SPENDING...

...BY SPENDING PER EMPLOYEE...

...AND IN RELATION TO SALES

	1991 R&D EXPENSES MILLIONS
GENERAL MOTORS	\$5,887
	5,001
	3,726
	3,114
AIRBUS	1,649
MAN KODAK	1,494
LETT-PACKARD	1,463
ING	1,417
GENERAL ELECTRIC	1,402
OMT	1,298

	1991 R&D EXPENSES PER EMPLOYEE
BIODIN	\$133,813
GENENTECH	96,698
SOFTWARE PUBLISHING	78,109
GENETICS INSTITUTE	77,157
CHIPS & TECHNOLOGIES	72,820
AMGEN	62,349
GRADCO SYSTEMS	60,520
MIPS COMPUTER SYSTEMS	53,378
CHIRON	52,581
NOVA PHARMACEUTICAL	48,675

	1991 R&D EXPENSES AS PERCENT OF SALES
CENTOCOR	126.7%
CHIRON	115.7
BIODIN	72.1
GENETICS INSTITUTE	55.2
GENENTECH	46.3
SOFTWARE PUBLISHING	39.6
IMMUNEX	38.1
CONTINUUM	37.3
ON-LINE SOFTWARE INTERNATIONAL	26.7
PHOENIX TECHNOLOGIES	26.7

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

any facility has taken heat recently for focusing on incremental developments to the detriment of the once freewheeling research that spawned the transistor and the laser.

A popular belief today, however, is that good companies can have it all. Says Mayo: "If there's one word that characterizes the new environment, it's the word 'and,' as in R and D." He cites as an example the lab's recent invention of the optical amplifier. The device, which will be used first in a transpacific undersea fiber-optic cable in 1994, will sharply increase the efficiency of light-wave transmissions. The rapid commercialization is possible because the lab started development engineering early—instead of waiting until basic research was finished.

IBM has another twist. It bypassed its traditional development processes altogether to bring out its Power Visualization System, a hardware and software package that turns strings of supercomputer data into easily manipulated pictures. Researchers worked directly with customers to get the product market-ready in record time. The project began in September, 1989. The first units, which start at \$320,000, were shipped last December.

Such success stories are no longer rare, but Corporate America still faces serious challenges. For one thing, new BUSINESS WEEK figures show that overseas rivals continue to plow money into R&D at a faster rate than their U.S. counterparts (table). Indeed, as U.S. companies tighten the reins on basic research, Japanese companies are taking the opposite tack. The most vivid example is NEC Corp.'s \$32 million complex in Princeton, N.J. The Japanese electronics giant has assembled some 45 researchers to explore fundamental problems in physics, biophysics, optoelectronics, and computer science.

DEFENSE PLAY. Besides these competitive threats, there's another nagging problem: A number of studies show that U.S. elementary and high school students continue to underperform their peers in most developed nations when it comes to science and math. Unless more attention is paid to this end of the R&D pipeline, former National Science Foundation Director Erich Bloch wonders whether better targeting and other strategies

will revitalize U.S. research. "People are getting the idea, but are they getting it fast enough?" Bloch asks.

The question strikes a nerve—and helps explain why Corporate America is looking to Washington for long-term help. Few resources are as great as the \$74.6 billion federal R&D budget. But nearly 60% of these funds are earmarked for defense. Largely as a result, the nation as a whole devotes a much lower percentage of R&D to civilian work than its chief rivals (chart).

With the collapse of the Communist bloc, the idea of redirecting military research and development funds to civilian use is gaining momentum. The reasoning: Although commercial technologies do drift out of military R&D—the jet engine is an example—the benefits would be faster and more abundant if the government launched a campaign to improve U.S. competitiveness. A formula for this is spelled out in a new book entitled *Beyond Spinoff: Military and Commercial Technologies in a Changing World*. The book is co-authored by five current and former members of the

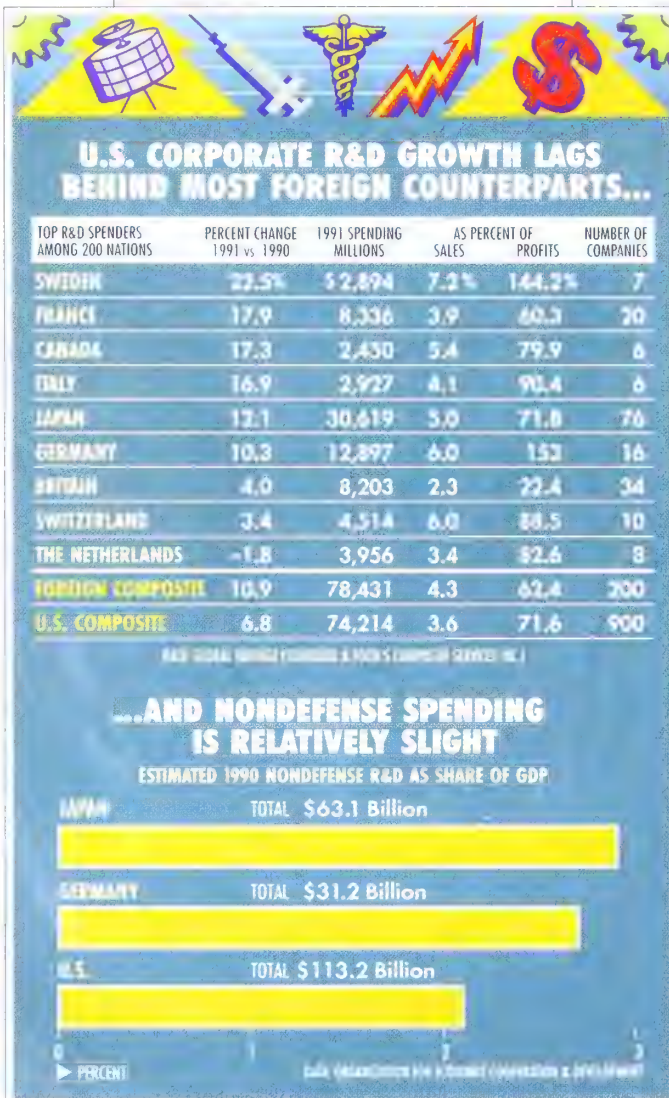
Center for Science & International Affairs (CSIA) at Harvard University's J. F. Kennedy School of Government.

The authors say government must take three steps. First is a program to educate companies about existing technologies. Next, just as the government builds and maintains roads, it should build wind tunnels and other test facilities that many companies can't afford. Finally, it should support R&D in pioneering technologies, such as automation and robotics, that will benefit many industries. "In order for the government's technology investments to be truly fruitful, they need to be in tune with the technology investments of private industry," argues CSIA Director Ashton Carter, one of the authors.

'STEPPING UP.' An early sign of momentum can be found in the 1993 federal budget proposal before Congress. Among its R&D expenditures is \$803 million for high-performance computing and networking, things such as high-speed data lines linking universities, government labs, and industry. Some \$4 billion is targeted for biotechnology—projects such as mapping the human genome. Another \$1.8 billion is earmarked for advanced materials and processing research, and \$321 million goes to advanced manufacturing. The figures represent a modest, though real, increase from current spending levels.

Motorola Inc. Chairman George M. C. Fisher cites this as evidence that the Administration and Congress are "stepping up to the plate." But he and others still see a need for comprehensive and explicit technology policy. This year could be a watershed. "A lot will depend on the next Administration," notes Edwin Mansfield, director of the University of Pennsylvania's Center for Economics and Technology. "And both economics and the politics are very much up for grabs." In spite of all the discord, there is one point of agreement: Industry is poised for recovery—and with the unique opportunity provided by the Soviet Union's collapse in shifting military funds to civilian use, there's never been a worse excuse for doing business as usual.

By Robert Buder in Boston with John Carey in Washington, Joseph Weber in Philadelphia, and bureau reports



R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 \$ MIL.	1990 %	R&D AS % OF PROFITS	
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
Federal-Mogul	FMO	20.3	90	1503.7	11	1235.9	11	1098.7	14	81.4	1.8	-18.1	NM	NEG
Fruehauf Trailer	FTC	1.4	-32	273.5	19	273.5	19	512.7	-13	98.6	0.3	-29.2	NM	NEG
Modine Mfg. (3)	MODI	7.3	8	1390.8	13	1573.0	10	482.0	10	91.7	1.5	48.3	22	15.1
Moog (9)	MOG.A	16.9	22	5121.2	2	4477.8	2	321.3	6	97.1	5.3	12.2	-8	138.8
Raytech	RAY	3.8	11	3944.9	4	2937.1	5	103.3	-14	107.4	3.7	1.7	-86	220.0
Schwitzer	SCZ	6.8	-1	6849.0	1	6403.0	1	111.0	-3	111.0	6.2	3.2	-47	212.6
Smith (A. O.)	SMCA	6.1	15	648.9	17	736.7	16	879.7	-6	93.6	0.7	7.8	-81	77.7
Standard Products (6)	SPD	10.2**	1	1349.7	14	1215.3	12	592.1	0	78.5	1.7	-13.1	NM	NEG
Superior Industries International	SUP	4.5	40	1498.0	12	960.0	15	273.5	2	91.2	1.6	28.5	43	15.8
Terex	TEX	4.0	-49	576.3	18	1113.1	14	784.2	-23	112.0	0.5	-42.6	NM	NEG
Walbro	WALB	6.7	57	2928.7	6	1740.7	9	200.1	20	87.0	3.4	6.9	143	97.7
(C) TIRE & RUBBER														
GROUP COMPOSITE		358.7	2	3370.1		3018.8		12490.8	-2	117.3	2.9	543.1	79	66.1
Bandag	BDG	14.7	31	5940.7	1	4338.5	1	582.9	-1	235.3	2.5	128.4	0	11.5
Cooper Tire & Rubber	CTB	14.0	30	2139.0	3	1847.4	3	1001.1	12	153.0	1.4	124.5	19	11.2
Goodyear Tire & Rubber	GT	330.0**	0	3387.4	2	2870.6	2	10906.8	-3	112.0	3.0	290.2	315	113.7
3 CHEMICALS														
INDUSTRY COMPOSITE		5144.0	0	9812.4		6202.6		125781.9	-2	239.9	4.1	8628.7	-30	59.6
Air Products & Chemicals (9)	APD	80.4	12	5506.8	27	5153.9	23	2931.1	1	200.8	2.7	362.6	8	22.2
American Cyanamid	ACY	492.0	14	15576.0	3	11990.2	6	4986.2	9	157.9	9.9	541.6	190	90.8
Arco Chemical	RCM	64.0	8	15165.9	4	13784.5	3	2837.0	0	672.3	2.3	319.0	-32	20.1
Betz Laboratories	BETZ	26.7	14	6711.6	20	5753.1	20	665.6	12	167.2	4.0	123.8	15	21.6
Cabot (9)	CBT	37.7	6	7107.2	16	6309.1	17	1482.1	-4	279.6	2.5	70.9	-4	53.1
Cambrex	CBM	3.3	-6	5626.1	26	6294.8	18	144.5	8	247.9	2.3	0.1	NM	6307.7
Crompton & Knowles	CNK	9.7	15	4732.7	33	4185.9	32	450.2	15	220.4	2.1	56.6	20	17.1
Detrex	DTRX	2.7	8	6096.2	22	4753.1	29	78.1	-17	174.7	3.5	-10.5	NM	NEG
Dexter	DEX	42.1	5	7510.0	15	6643.0	16	937.7	3	167.5	4.5	11.2	-86	375.8
Dow Chemical	DOW	1159.0	2	18627.7	1	15502.0	1	18807.0	-5	302.3	6.2	1688.0	-34	68.7
Du Pont	DD	1298.0	-9	9790.5	9	9461.7	8	38151.0	-3	287.8	3.4	2818.0	-32	46.1
Engelhard	EC	45.1	-1	7044.7	17	5725.9	21	2429.9	-17	379.7	1.9	117.6	25	38.3
Ethyl	EY	69.1	6	11519.8	8	8946.8	9	2574.9	2	429.1	2.7	294.7	-17	23.5
F&C International (6)	FCIN	2.8	194	7927.2	11	7927.2	10	46.9	145	131.4	6.0	3.3	492	85.9
Ferro	FOE	17.6	-13	2414.9	42	2183.0	41	1056.9	-6	144.7	1.7	21.5	-53	82.1
First Mississippi (6)	FRM	4.2	5	3318.5	36	4828.8	28	536.7	8	426.3	0.8	8.4	35	50.0
Fuller (H. B.) (11)	FULL	17.2	7	3071.4	38	2850.9	39	852.9	8	152.3	2.0	47.4	28	36.3
G-I Holdings		19.9	8	4883.4	31	3612.7	35	925.6	0	227.1	2.2	223.6	NM	8.9
Goodrich (B. F.)	GR	77.7	3	5390.2	28	4953.0	25	2471.6	2	171.5	3.1	-109.5	NM	NEG
Grace (W. R.)	GRA	150.4	2	3230.2	37	2815.8	40	6049.1	1	129.9	2.5	358.7	9	41.9
Great Lakes Chemical	GLK	39.0	34	6845.4	19	7719.8	11	1307.6	23	229.4	3.0	320.3	11	12.2
Grow Group (6)	GRO	4.4	1	2092.9	44	2060.9	42	412.1	0	196.2	1.1	-21.3	NM	NEG
Hercules	HPC	86.1	-7	4971.5	30	3888.5	33	2928.9	-8	169.1	2.9	165.7	1	52.0
ICN Biomedicals	BIM	1.7	-18	2176.8	43	1835.0	44	96.5	-26	124.5	1.7	-13.3	NM	NEG
Indspec Chemical (3)		2.2	13	5705.4	25	5366.8	22	98.7	-7	255.1	2.2	-7.0	NM	NEG
International Specialty Products	ISP	17.8	9	7858.7	12	7596.0	12	525.8	3	232.1	3.4	79.0	74	22.5
Lawter International	LAW	3.9	5	7797.2	13	7356.3	14	152.9	2	307.0	2.5	36.4	11	10.7
LeaRonald (2)	LRI	2.3	2	4694.0	34	4889.7	27	142.4	1	284.9	1.6	10.9	-28	21.6
Loctite	LOC	22.5	16	6272.1	21	4943.6	26	561.2	10	156.5	4.0	95.9	14	23.5
Lubrizol	LZ	80.0	7	15090.4	5	13810.3	2	1476.3	2	278.6	5.4	178.1	-34	44.9
MacDermid (3)	MACD	6.3	1	7591.8	14	7361.3	13	151.4	2	181.7	4.2	11.3	23	55.8
Mississippi Chemical (6)		1.2	28	1311.0	46	1168.3	45	321.1	28	341.9	0.4	-7.5	NM	NEG
Monsanto	MTC	627.0	2	15961.9	2	13767.3	4	8864.0	-1	225.7	7.1	458.0	-45	136.9
Morton International (6)	MIL	58.6	23	5745.1	24	NA	46	1905.9	16	186.9	3.1	214.4	0	27.3
Nalco Chemical	NLC	47.4	13	6933.5	18	7177.5	15	1237.3	16	181.1	3.8	221.5	6	21.4
N.I. Industries	NL	9.0	-18	2571.4	41	3372.9	37	840.3	-7	240.1	1.1	-19.0	NM	NEG
Peitolite (10)	OLN	41.0	-38	2847.2	40	3881.8	34	2275.0	-12	158.0	1.8	-25.0	NM	NEG
Quantum Chemical	PLT	11.4	-7	5938.2	23	5825.3	19	323.5	9	168.1	3.5	22.4	13	51.1
Rexene	CUE	47.1	-4	5322.0	29	4313.0	31	2486.3	-5	280.9	1.9	-167.0	NM	NEG
	RXN	6.3	3	4875.3	32	4414.6	30	449.7	-10	350.5	1.4	-56.2	NM	NEG

R&D SCOREBOARD

MPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 %	PER EMPLOYEE				CHANGE FROM 1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 %	R&D AS % OF PROFITS			
			1991 \$ MIL	1991 RANK	AVG 1987-91 \$	AVG 1987-91 RANK								
m & Haas	ROH	183.0	3	14216.9	6	13152.5	5	2773.0	-2	215.4	6.6	240.0	-23	76.3
ts (9)	SCTT	5.1	10	2957.8	39	2864.9	38	388.1	11	224.2	1.3	4.5	NM	114.9
is Resources		2.9	-6	1787.5	45	2047.6	43	309.1	6	193.2	0.9	20.3	234	14.1
Investors Holdings (9)		33.3	2	11892.9	7	11785.7	7	832.3	3	297.3	4.0	-22.4	NM	NEG
on Carbide	UK	157.0	0	9398.4	10	5139.0	24	4877.0	-7	291.9	3.2	-168.0	NM	NEG
co	WIT	27.9	7	4033.5	35	3431.5	36	1630.5	0	235.7	1.7	109.8	4	25.4

CONGLOMERATES

INDUSTRY COMPOSITE		3550.4	-3	4275.7		2783.8		135557.8	0	163.3	2.6	8912.8	-17	39.8
ad-Signal	ALD	381.0	-11	3875.9	6	3743.4	4	11831.0	-4	120.4	3.2	-390.0	NM	NEG
ec Industries	COT	23.8**	0	2085.4	9	1801.9	9	1373.0	-8	120.4	1.7	125.5	-20	18.9
ie International	FIGI	13.0	-16	946.7	12	914.6	12	1243.5	-9	90.8	1.0	43.2	-33	30.0
teral Electric	GE	1402.0	-5	4936.6	2	4459.5	3	59379.0	3	209.1	2.4	6508.0	4	21.5
	ITT	538.0**	-5	4890.9	3	4655.9	1	20421.0	-1	185.6	2.6	990.0	-29	54.3
	QLTV	30.1	17	869.9	13	674.1	13	5986.4	-2	173.0	0.5	-40.9	NM	NEG
(7)	PLL	30.3	26	4730.6	5	3522.1	6	657.0	16	102.7	4.6	115.8	19	26.1
way	PRY	19.9	0	2398.2	8	2246.6	8	981.6	4	118.3	2.0	43.5	5	45.8
mark International	PMI	31.2	-1	1300.0	11	1166.6	11	2815.7	3	117.3	1.1	159.9	61	19.5
kwel International (9)	ROK	492.3	1	5658.4	1	4460.0	2	11927.4	-4	137.1	4.1	1023.5	-3	48.1
dyne	TDY	50.9	5	1731.3	10	1800.9	10	3206.8	-7	109.1	1.6	-31.8	NM	NEG
tron	TXT	192.0	-4	3692.3	7	3112.4	7	7822.5	-1	150.4	2.5	495.0	8	38.8
V	TRW	346.0	12	4855.3	4	3631.0	5	7913.0	-3	111.0	4.4	-129.0	NM	NEG

CONSUMER PRODUCTS

INDUSTRY COMPOSITE		2022.0	11	2201.4		3061.6		145625.6	8	158.2	1.4	15331.6	1	13.2
APPLIANCES & HOME FURNISHINGS														
GROUP COMPOSITE		200.4	-2	1638.3		1593.9		14477.4	-1	118.4	1.4	347.3	-32	57.7
nsstrong World Industries	ACK	55.6	-12	2310.3	3	2318.7	3	2439.3	-3	101.4	2.3	102.4	-55	54.3
amics Corp. of America	DYA	1.0	27	852.6	6	669.5	6	112.0	2	91.7	0.9	2.6	-28	39.5
xsteel Industries (6)	FLXS	1.3	-8	658.4	8	562.9	8	145.6	-16	72.6	0.9	3.1	-69	42.9
erco (2)	ISS	3.8	12	171.9	11	58.0	11	1439.2	-13	65.1	0.3	-215.5	NM	NEG
ball International (6)	KBALB	4.8	27	629.8	9	558.4	9	555.3	-9	73.5	0.9	49.1	-31	9.7
Z-Boy Chair (4)	LZB	5.9**	20	753.7	7	588.9	7	608.0	3	77.7	1.0	38.4	-16	15.4
gett & Platt	LEG	5.1	7	487.5	10	385.4	10	1081.8	-1	104.0	0.5	63.9	26	7.9
IS Holdings		5.1	-16	954.9	5	1010.7	5	341.4	2	64.3	1.5	-57.3	NM	NEG
yal Appliance Mfg.	RVAC	1.3	22	1842.8	4	1842.8	4	273.3	128	380.1	0.5	45.4	288	2.9
o (7)	TTC	26.5**	6	8251.2	1	6888.1	1	711.6	-5	221.8	3.7	15.3	-42	173.3
irllpool	WHR	90.0	0	2375.5	2	2614.8	2	6770.0	2	178.7	1.3	300.0	65	30.0

OTHER CONSUMER GOODS

GROUP COMPOSITE		581.0	11	986.9		1681.9		82682.1	8	141.1	0.7	10245.7	4	5.7
merican Brands	AMB	28.9	20	607.1	8	422.5	8	8379.0	2	176.0	0.3	1238.0	19	2.3
rry (R. G.)	RGB	3.0	-23	1200.0	5	989.7	5	102.8	-6	41.1	2.9	1.3	NM	NEG
oke Group	BGL	9.8	-19	NA	10	NA	10	999.4	4	NA	1.0	-143.5	NM	NEG
ors (Adolph)	ACCOB	28.4	28	2408.4	2	2201.6	2	1917.4	4	162.5	1.5	23.2	-64	122.4
trument Systems (9)	ISY	3.8	27	666.7	7	501.9	7	494.3	8	86.7	0.8	28.8	34	13.2
ermagnetics General (5)	INMA	1.2	-39	2735.4	1	6094.7	1	60.8	30	136.3	2.0	3.1	219	38.9
ce (5)	NKE	9.7	15	1763.6	4	1757.5	4	3003.6	34	546.1	0.3	461.7	17	2.1
osiCo	PEP	99.0	-2	292.9	9	345.5	9	19607.9	10	58.0	0.5	1670.3	0	5.9
ilip Morris	MO	396.0	15	2385.5	3	2009.8	3	48064.0	8	289.5	0.8	6971.0	10	5.7
ave Shoe (9)	SWV	1.1	2	916.8	6	879.3	6	53.0	-15	42.4	2.2	-5.7	NM	NEG

PERSONAL CARE

GROUP COMPOSITE		1240.6	13	5825.9		4761.9		48466.0	10	227.6	2.6	4738.6	-2	26.2
on Products	AVP	29.6	3	970.5	16	996.4	16	3593.3	4	117.8	0.8	371.7	4	8.0
ck Drug (3)	BLOCA	15.7	19	5042.8	7	4090.9	7	512.9	18	165.2	3.1	69.1	21	22.7
attem (11)	CHTT	1.3	26	3571.4	9	3195.4	9	100.7	19	281.9	1.3	7.1	32	17.9
urch & Dwight	CHD	13.4	9	12352.5	2	8802.5	2	486.6	13	450.2	2.7	42.0	8	31.8
rox (6)	CLX	47.4	21	7766.6	5	7234.1	5	1646.5	11	269.9	2.9	86.2	-65	55.0
lgate-Palmolive	CL	114.2	16	4586.3	8	3385.4	8	6060.3	6	243.4	1.9	217.9	-57	52.4
l Laboratories	DLI	3.1	14	3189.7	11	2739.3	12	127.6	5	131.5	2.4	3.5	17	88.2
olab	ECL	17.4	0	2400.5	15	1436.8	15	918.0	-9	126.4	1.9	84.7	-6	20.6

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 \$ MIL.	1990 %	R&D AS % OF PROFIT
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
Gillette	G	108.9	14	3490.4	10	2954.5	11	4683.9	8	150.1	2.3	694.1	17	15.7
Helene Curtis Industries (2)	HC	16.0	12	5325.0	6	4097.6	6	867.3	26	289.1	1.8	16.3	-46	98.2
International Flavors & Fragrances	IFF	62.2	8	14745.6	1	12714.0	1	1017.0	6	241.1	6.1	269.5	7	23.1
Neutrogena (10)	NGNA	2.0	5	2844.2	13	2118.7	14	231.3	10	321.6	0.9	32.8	14	6.2
Procter & Gamble (6)	PG	786.0	13	8361.7	4	8091.1	4	27026.0	12	287.5	2.9	2687.0	11	29.3
St. Ives Laboratories	SWIS	1.0	21	2406.6	14	2406.6	13	120.0	12	283.8	0.8	6.1	10	16.8
Stepan	SCL	11.6	14	8776.0	3	8742.9	3	414.1	6	314.4	2.8	18.9	-15	61.3
Tambrands	TMB	11.0	-6	2881.6	12	3177.4	10	660.7	5	173.9	1.7	131.8	-15	8.3

6 CONTAINERS & PACKAGING

INDUSTRY COMPOSITE		112.3	1	1061.1		1579.3		14671.1	12	138.6	0.8	689.3	23	16.3
Ball	BLI	12.4	1	933.4	9	1488.0	7	2267.4	67	170.7	0.5	109.1	52	11.4
Bemis	BMS	13.2	-14	1696.1	6	1686.0	5	1141.6	1	146.4	1.2	87.7	3	15.1
Clarcor (11)	CLC	2.2	73	972.5	8	673.2	11	179.5	5	80.9	1.2	28.5	-6	7.6
Crown Cork & Seal	CCK	16.1**	18	906.4	10	906.4	9	3807.4	24	214.3	0.4	215.0	19	7.5
Formica		3.6	0	1201.3	7	1104.1	8	421.2	-4	140.4	0.9	-9.6	NM	NEG
Liqui-Box	LIQB	2.3	-4	3113.8	2	2233.2	3	107.8	-5	146.1	2.1	16.4	0	14.0
Nashua	NSH	10.2	22	2638.1	4	1545.4	6	526.1	-11	136.0	1.9	3.5	-90	295.8
Owens-Illinois	OI	20.8	-4	606.4	12	511.1	12	3541.1	-3	103.2	0.6	60.3	187	34.5
Playtex Family Products		5.4	6	3375.0	1	2891.2	1	393.9	-3	246.2	1.4	-1.4	NM	NEG
Sealright	SRCO	5.4	15	3011.7	3	2666.9	2	258.3	26	144.1	2.1	27.5	6	19.6
Sonoco Products	SONO	9.9	-16	683.2	11	777.1	10	1697.1	2	117.1	0.6	158.4	68	6.3
West	WST	10.8**	-1	2170.6	5	2156.8	4	329.6	2	66.2	3.3	-6.1	NM	NEG

7 ELECTRICAL & ELECTRONICS

INDUSTRY COMPOSITE		7374.9	6	6421.4		7856.1		128237.0	3	111.7	5.8	5448.3	-31	135.4
(A) ELECTRICAL PRODUCTS														
GROUP COMPOSITE		728.8	5	2830.6		2802.6		28215.4	-1	109.6	2.6	209.1	-88	348.5
Acme Electric (6)	ACE	6.6**	2	8037.8	2	6181.8	2	79.9	-12	97.5	8.2	-11.5	NM	NEG
American Power Conversion	APCC	2.7	64	5954.4	3	5256.8	4	93.6	58	203.1	2.9	24.2	64	11.4
Baldor Electric	BEZ	9.9	5	3326.6	9	2940.0	9	286.5	-3	96.3	3.5	19.4	-16	50.9
Charter Power Systems (1)	CHP	1.8	1	1436.8	20	1451.0	20	165.1	4	130.4	1.1	10.2	114	17.8
Coleman	CLN	2.7	15	1082.8	24	1082.8	22	352.9	20	140.5	0.8	28.7	58	9.5
Computer Products	CPRD	6.2	14	4297.5	6	3526.3	7	83.2	-13	58.1	7.4	-4.1	NM	NEG
Emerson Electric (9)	EMR	237.9	2	3423.0	7	3047.6	8	7427.0	-2	106.9	3.2	1003.1	1	23.7
Exide Electronics Group (9)	XUPS	7.2	3	5573.8	4	5609.9	3	191.6	11	147.4	3.8	-7.9	NM	NEG
Franklin Electric	FELE	2.3	7	1121.5	22	995.3	23	184.1	3	89.8	1.2	20.4	14	11.3
Genlyte Group	GLYT	3.5	-24	1111.6	23	1189.1	21	428.5	-13	134.4	0.8	3.4	-72	105.4
Joslyn	JOSL	4.1	-9	2157.9	14	1799.1	16	203.7	3	107.2	2.0	20.5	NM	20.0
Juno Lighting (11)	JUNO	2.0	-5	2845.7	12	2389.5	11	79.5	-7	113.6	2.5	19.2	-11	10.4
Kollmorgen	KOL	10.3	-1	5164.0	5	3951.5	5	200.5	-16	100.2	5.2	-37.5	NM	NEG
Kuhlman	KUH	1.0	-45	1167.6	21	2024.9	12	126.2	7	141.9	0.8	12.3	17	8.4
Lamson & Sessions	LMS	3.0	50	1768.9	19	800.3	24	290.9	-9	171.5	1.0	-15.6	NM	NEG
MagneTek (6)	MAG	10.5	31	724.1	25	608.9	25	1134.3	7	78.2	0.9	61.8	10	17.0
Powell Industries (10)	POWL	1.6	42	1987.6	17	1537.6	19	146.7	12	181.5	1.1	11.2	3	14.3
Raychem (6)	RYC	140.2	14	12291.4	1	9702.6	1	1249.5	12	109.5	11.2	-3.1	NM	NEG
Reliance Electric		34.0	6	2408.3	13	1827.4	14	1516.0	-2	107.4	2.2	72.0	-25	47.2
Robbins & Myers (8)	ROBN	1.2	26	2084.3	16	1677.1	18	78.7	12	132.7	1.6	9.7	24	12.7
SL Industries (7)	SL	2.1	34	3259.5	10	1817.3	15	54.8	-9	83.6	3.9	-11.8	NM	NEG
Thomas & Betts	TNB	15.0	-19	3183.2	11	3756.8	6	566.4	-5	120.5	2.6	68.0	-9	22.0
Thomas Industries	TII	12.1	9	3416.7	8	2674.6	10	408.4	-12	115.7	3.0	7.2	-64	166.4
Westinghouse Electric	WX	209.0	5	1838.8	18	1708.6	17	12794.0	-1	112.6	1.6	-1096.0	NM	NEG
Woodhead Industries (9)	WDHD	1.7**	11	2143.4	15	1956.7	13	73.5	2	90.1	2.4	5.2	-38	33.7

(B) ELECTRONICS

GROUP COMPOSITE		2705.2	7	6334.0		6196.1		48912.4	3	114.5	5.5	2853.0	-18	94.8
AEL Industries (2)	AEINA	1.6	-33	1138.9	36	1113.9	37	144.3	19	102.2	1.1	2.7	NM	59.3
Andrew (9)	ANDW	20.3	-10	6035.9	16	5765.2	14	416.2	14	123.5	4.9	35.9	21	56.7
Aritech	ARIT	3.4	-2	8144.9	12	4479.2	21	84.5	-18	200.6	4.1	1.8	NM	194.4
Aydin	AYD	4.9	-22	3490.7	24	3831.2	25	158.5	11	113.2	3.1	17.2	71	28.4
California Microwave (6)	CMIC	2.8	8	2682.9	29	2957.4	28	177.4	22	168.9	1.6	12.7	21	22.2
Checkpoint Systems	CHEK	3.3	24	4095.2	21	4039.1	23	52.9	-7	65.4	6.3	0.6	-91	521.7

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 %	R&D AS % OF PROFITS	
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
Cinnati Microwave	CNMW	3.6	10	8880.0	9	7995.6	8	54.3	-25	135.7	6.5	-9.9	NM	NEG
mpression Labs	CLIX	4.3	42	12879.2	5	18399.2	4	72.6	40	219.4	5.9	-15.1	NM	NEG
ibic (9)	CUB	2.9	-20	937.7	38	1213.3	35	307.8	-13	99.3	0.9	22.4	-41	13.0
agnostic/Retrieval Systems (3)	DRS.A	0.8	-66	2178.0	32	4616.8	20	47.8	-17	134.9	1.6	-5.7	NM	NEG
igital Microwave (3)	DMIC	12.6	33	20799.3	3	18744.3	3	136.0	23	223.7	9.3	5.0	-75	251.9
nascan	DYNA	1.4**	13	5000.0	18	4765.8	17	135.9	-20	485.4	1.0	-7.0	NM	NEG
C International (6)	ECC	1.1**	174	1188.3	34	895.4	38	69.4	24	72.6	1.6	6.4	25	17.8
O	EDO	3.8	5	2617.8	30	2777.5	29	145.7	5	101.2	2.6	2.5	-49	148.9
etra Scientific Industries (5)	ESIO	9.0	-31	14037.5	4	12435.5	5	66.7	-10	104.2	13.5	1.6	NM	578.1
ronics International	FBRX	3.8	9	8202.1	11	8666.3	6	53.9	-14	116.0	7.1	-3.3	NM	NEG
A Hughes Electronics	GMH	634.9	12	6834.2	14	5819.0	13	11480.5	-2	123.6	5.5	795.2	-33	79.8
irmon Industries	HRMN	4.0	17	5154.6	17	4618.6	19	70.9	-2	91.4	5.6	4.6	-10	86.8
irris (6)	HRS	135.1	-7	4400.6	20	4347.9	22	3040.1	0	99.0	4.4	9.8	-95	1384.5
ogo (2)	KNO	2.6	4	3263.0	26	2769.1	30	80.0	19	98.8	3.3	1.9	-28	137.7
on Industries (7)	LIT	171.3	3	3275.3	25	2446.6	32	5219.0	1	99.8	3.3	183.6	-43	93.3
ral (3)	LOR	105.3	50	4433.3	19	4749.0	18	2126.8	67	89.5	5.0	163.4	33	64.5
rance Electronics (7)	LEIX	1.3	-24	2693.8	28	3087.8	27	53.6	-12	114.7	2.3	-2.7	NM	NEG
rodyne (9)	MCDY	0.8	NM	1408.1	33	5547.7	15	56.5	58	103.9	1.4	10.9	115	7.0
osler (6)		2.7	25	1146.3	35	1146.3	36	212.8	-5	91.3	1.3	-3.8	NM	NEG
otorola	MOT	1079.0	5	10578.4	6	7920.0	9	11341.0	4	111.2	9.5	613.0	-8	176.0
etics (3)	O.A	5.1	84	8442.4	10	7578.6	10	72.4	31	120.9	7.0	1.5	22	333.4
alcomm (9)	QCOM	22.7	177	36665.6	1	36665.6	1	90.3	94	145.8	25.1	-8.4	NM	NEG
ythcon	RTN	278.5	4	3890.2	22	3590.7	26	9274.2	0	129.5	3.0	872.7	4	31.9
il Systems (6)	SCIS	36.2*	11	3710.7	23	3917.2	24	1128.9	-4	115.6	3.2	2.4	3	1522.7
nsormatic Electronics (5)	SRM	6.8	24	2570.9	31	2684.8	31	239.2	25	90.4	2.8	31.2	25	21.8
anford Telecommunications (3)	STII	7.4	4	7293.2	13	8454.0	7	102.5	15	101.2	7.2	6.0	NM	123.5
l International (9)	TCII	2.7	-12	6794.9	15	4860.5	16	57.4	-3	147.2	4.6	0.6	NM	428.8
ch-Sym	TSY	5.1	20	2699.6	27	2103.7	33	176.4	31	92.8	2.9	13.9	11	36.9
kelec	TKLC	10.9	57	32056.0	2	24649.0	2	52.4	24	154.7	20.7	6.7	-18	161.2
ited Industrial	UIC	2.8	-9	1028.9	37	1248.0	34	258.0	2	95.6	1.1	18.5	27	15.0
rian Associates (9)	VAR	83.4	8	8963.2	8	7399.8	11	1377.9	9	148.2	6.1	92.8	348	89.9
atkins-Johnson	WJ	27.2	11	10374.0	7	7032.1	12	277.5	11	105.9	9.8	-28.7	NM	NEG
) INSTRUMENTS														
GROUP COMPOSITE		1283.6	1	5908.1		7826.3		24432.8	1	112.5	5.3	669.5	-34	191.7
len Group	ALN	1.4	22	575.0	49	367.8	49	262.0	-15	109.2	0.5	18.4	862	7.5
metek	AME	12.1	9	1983.6	44	2685.5	41	715.1	8	117.2	1.7	52.4	-8	23.1
alogic (7)	ALOG	19.8	3	15319.4	8	13545.1	9	137.2	-1	106.4	14.4	17.0	-5	116.0
plied Biosystems (6)	ABIO	21.7	0	17465.4	4	15997.4	4	163.9	3	131.7	13.3	-3.2	NM	NEG
utoclave Engineers (5)	ACLV	2.3	20	3384.1	40	2988.3	40	81.1	4	117.5	2.9	-0.5	NM	NEG
adger Meter	BMI	4.0	5	4732.2	35	3856.7	36	78.4	2	91.7	5.2	2.4	-31	167.3
ackman Instruments	BEC	82.2**	2	11942.5	12	9816.5	14	857.9	5	124.6	9.6	63.8	4	128.8
El Electronics (9)	BEII	7.3**	75	4631.0	36	3887.3	35	146.2	57	93.2	5.0	9.7	-11	75.1
coastal		0.9	0	2117.6	43	2287.6	43	51.3	1	120.7	1.8	-40.6	NM	NEG
o-Rad Laboratories	BIO.A	28.2	13	11766.7	14	9809.0	15	310.7	8	129.4	9.1	13.5	-22	209.1
herent (9)	COHR	26.1	19	16388.3	7	13261.3	10	207.8	9	130.4	12.6	3.5	-17	738.1
aniel Industries (9)	DAN	3.3	44	1844.4	45	1944.4	45	201.7	18	112.1	1.6	-2.8	NM	NEG
ata I/O	DAIO	8.4	17	17345.0	5	16762.6	3	67.4	11	138.4	12.5	4.9	14	171.5
ionex (6)	DNEX	7.5	8	11980.9	11	11363.7	12	89.3	11	142.2	8.4	21.8	9	34.5
dec (3)	ELDC	11.6	83	7763.4	22	4464.9	31	123.0	11	82.7	9.4	4.4	-41	261.4
SCO Electronics (9)	ESE	11.5	-13	2205.0	41	2162.6	44	481.2	-11	92.5	2.4	-66.8	NM	NEG
sterline Technologies (10)	ESL	16.6**	-2	4748.0	34	4412.8	32	350.9	-10	100.3	4.7	12.0	0	139.0
schler & Porter	FP	12.8	-4	5319.1	30	4315.6	33	237.0	0	98.2	5.4	-18.3	NM	NEG
uke (John) Mfg. (9)	FKM	21.1	6	9539.3	18	9246.6	18	239.7	2	108.2	8.8	3.4	-77	613.8
elman Sciences (7)	GSC	3.7	-19	4879.7	33	5236.1	29	76.5	4	100.0	4.9	0.3	NM	1104.4
enRad	GEN	24.2	-21	17671.5	3	15769.3	5	156.4	-13	114.2	15.5	-39.0	NM	NEG
ach (4)	HACH	4.4	10	5465.0	29	5076.7	30	72.3	15	90.4	6.0	9.6	19	45.5
enley Group	HENG	11.0	-35	2200.0	42	3409.4	38	704.0	-15	140.8	1.6	-481.0	NM	NEG
oneywell	HON	300.7	8	5168.3	31	4301.0	34	6192.9	-2	106.4	4.9	509.4	-1	59.0
urco (10)	HURC	2.8	-27	4547.5	37	5445.5	27	80.8	-14	130.0	3.5	2.9	-61	98.3

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM		PER EMPLOYEE				CHANGE FROM		PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM		R&D AS % OF PROFIT
		1991 \$ MIL.	1990 %	1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK	1991 \$ MIL.	1990 %			1991 \$ MIL.	1990 %	
IFR Systems (6)	IFRS	5.3	12	8106.2	20	6020.5	25	48.7	-6	74.9	10.8	6.4	-41	82.7
Imo Industries	IMD	15.8	6	1841.7	46	1472.3	47	1024.0	1	119.1	1.5	20.2	-52	78.4
Instron	ISN	7.9	14	7672.5	23	7071.9	21	126.4	4	123.2	6.2	7.9	46	100.1
Johnson Controls (9)	JCI	51.0	-19	1194.4	47	1547.5	46	4559.0	1	106.8	1.1	176.0	2	29.0
K-Tron International	KTII	3.6	23	6279.2	28	5525.8	26	80.5	17	140.5	4.5	5.3	15	68.5
Keithley Instruments (9)	KEI	11.7	-2	16399.4	6	13831.1	8	99.5	-1	139.0	11.8	6.8	20	172.3
KLA Instruments (6)	KLAC	11.2	-35	10163.6	16	14922.1	6	148.4	-8	134.9	7.5	3.5	-81	319.5
LTX (7)	LTX	21.9**	10	19107.5	2	23229.3	2	200.4	40	175.1	10.9	5.6	NM	389.3
Measurex (11)	MX	23.0	14	9090.5	19	7733.0	20	254.0	-5	100.4	9.1	0.5	-98	4431.4
Mechanical Technology (9)	MTIX	2.8	-18	5001.8	32	3563.7	37	64.7	-10	114.1	4.4	-9.3	NM	NEG
Millipore	MIL	58.0	5	10078.4	17	9003.1	19	748.0	6	130.0	7.8	77.9	120	74.4
Moore Products	MORP	9.1	-3	7022.5	25	6275.2	23	97.1	-2	75.3	9.3	0.8	77	1172.5
MTS Systems (9)	MTSC	9.3	-17	6757.3	26	6127.4	24	157.9	-1	115.1	5.9	14.4	27	64.6
Newport (7)	NEWP	4.0	-8	8101.0	21	6991.2	17	59.7	2	120.7	6.7	4.8	-29	82.9
Nicolet Instrument (3)	NIC	12.3**	4	11811.5	13	11312.3	13	132.1	5	126.4	9.3	7.2	31	171.5
Optical Coating Laboratory (10)	OCLI	7.7	41	7402.3	24	5387.1	28	103.7	11	99.8	7.4	1.5	-76	498.4
Perkin-Elmer (7)	PKN	65.9**	4	10372.6	15	9704.6	16	874.4	4	137.6	7.5	7.8	-87	845.8
Sparton (6)	SPA	2.4	-10	965.2	48	832.2	48	214.4	20	85.7	1.1	7.5	NM	32.0
Sun Electric	SE	7.8**	24	3526.1	39	2653.3	42	220.4	-9	100.0	3.5	-2.4	NM	NEG
Tektronix (5)	TEK	172.4	-11	14426.5	10	13100.9	11	1330.9	-5	111.4	13.0	78.0	NM	221.0
Teradyne	TER	62.0**	-7	14427.7	9	13901.8	7	508.9	11	118.4	12.2	20.3	NM	305.9
Thermo Electron	TMO	26.2	18	4387.4	38	3340.0	39	805.5	12	135.0	3.3	79.2	32	33.1
Thermo Instrument Systems	THI	16.3	19	6312.6	27	6319.9	22	338.7	19	131.0	4.8	43.6	34	37.5
Trimble Navigation	TRMB	30.2	122	34312.1	1	32831.7	1	151.0	139	171.4	20.0	8.9	210	338.5
(D) SEMICONDUCTORS														
GROUP COMPOSITE		2657.3	7	10773.4		11670.5		26676.4	9	108.2	10.0	1716.7	3	154.8
Adaptec (3)	ADPT	14.0	32	20385.7	16	19803.6	11	128.9	18	187.6	10.9	17.1	-5	81.7
Advanced Micro Devices	AMD	213.8	5	18994.6	19	15844.0	17	1226.6	16	109.0	17.4	145.3	NM	147.1
Alpha Industries (3)	AHA	1.4	11	1454.1	46	2457.5	45	66.3	3	67.7	2.1	2.2	NM	63.4
Altera	ALTR	14.4	35	32244.4	8	30205.4	8	106.9	36	239.6	13.5	27.8	34	51.6
AMP	AMP	265.0**	1	10600.0	26	10153.0	25	3095.0	2	123.8	8.6	423.6	-8	62.6
Amphenol	APH	14.2**	-12	2521.4	43	2521.4	43	489.1	-2	86.6	2.9	-3.5	NM	NEG
Analog Devices (10)	ADI	89.0	11	17115.6	22	13296.8	22	537.7	11	103.4	16.6	9.4	NM	948.6
Atmel	ATML	15.1	3	17282.1	21	17282.1	15	120.4	57	138.1	12.5	14.9	111	101.4
Augat	AUG	16.0	18	3902.4	39	4114.8	38	281.6	-6	68.7	5.7	-21.6	NM	NEG
Brooktree (9)	BTRE	17.7	32	33005.6	7	31334.3	7	83.4	22	155.6	21.2	13.1	34	135.4
Burr-Brown	BBRC	19.9	5	12036.4	24	10939.6	24	178.6	1	108.3	11.1	-9.4	NM	NEG
Chips & Technologies (6)	CHPS	52.7	16	72820.3	1	63495.5	1	225.1	-23	310.9	23.4	-16.5	NM	NEG
CTS	CTS	5.7	37	1166.9	49	801.8	49	229.5	-9	47.4	2.5	6.2	-35	90.6
Cypress Semiconductor	CY	71.8	29	36889.5	5	31927.5	6	286.8	27	147.5	25.0	51.8	3	138.6
Dallas Semiconductor	DS	15.1	1	22803.6	14	21296.9	9	103.8	4	156.7	14.5	23.0	13	65.6
DH Technology	DHTK	3.7	32	6127.7	35	4390.4	37	46.5	13	76.2	8.0	6.8	-26	55.2
Diceon Electronics (9)	DICN	1.6	192	1452.3	47	540.7	53	105.9	-16	97.1	1.5	-15.8	NM	NEG
Electromagnetic Sciences	ELMG	6.6	46	11015.0	25	6784.0	31	75.3	15	125.6	8.8	13.0	NM	51.0
Exar (3)	EXAR	9.6	34	17689.5	20	14496.3	19	112.7	29	208.4	8.5	11.5	29	83.6
GTI	GTI	2.5**	212	1166.0	50	354.0	54	77.9	44	36.3	3.2	6.3	68	39.6
Integrated Device Technology (3)	IDTI	50.8	22	24779.7	11	18334.8	13	198.6	5	96.8	25.6	0.8	-97	6082.3
Intel	INTC	618.0	20	25123.9	10	18481.1	12	4778.6	22	194.3	12.9	1194.6	21	51.7
International Microelectronic Products (3)	IMPX	13.5	4	31823.5	9	20937.6	10	51.3	-26	120.7	26.4	-19.4	NM	NEG
International Rectifier (6)	IRF	7.5	14	2791.9	42	3017.4	40	252.8	10	93.6	3.0	18.2	595	41.3
Lattice Semiconductor (3)	LSCC	10.4	73	42822.3	2	35504.0	3	64.5	66	266.7	16.1	14.6	104	71.2
Linear Technology (6)	LTC	10.2	32	14017.8	23	11962.2	23	94.2	25	129.2	10.9	26.2	50	39.0
LSI Logic	LSI	82.8	38	19696.0	17	14286.0	20	697.8	6	166.0	11.9	12.3	NM	675.5
Maxim Integrated Products (6)	MXIM	11.0	28	19010.4	18	16808.9	16	73.8	32	127.9	14.9	15.6	53	70.3
Methode Electronics (4)	METHA	8.0	12	4188.5	38	3525.0	39	149.4	13	78.2	5.4	12.0	40	66.4
Micron Technology (8)	MU	35.8	0	8744.6	28	6660.3	32	425.4	28	103.9	8.4	5.9	91	606.6
Micronics Computers (9)	MCRN	8.9	61	35027.6	6	35027.6	4	133.9	64	527.2	6.6	15.6	125	57.0
Microsemi (9)	MSCC	1.1	9	576.2	54	759.1	51	82.7	-7	42.2	1.4	3.2	NM	34.9
Molex (6)	MOLX	38.3	21	5512.2	36	4750.7	35	708.0	19	101.8	5.4	117.9	7	32.5
National Semiconductor (5)	NSM	198.6	21	6664.4	32	7507.1	28	1701.8	2	571	11.7	-149.0	NM	NEG
Optek Technology (10)	OPTX	0.7	-6	370.9	55	338.9	55	51.7	-4	28.0	1.3	-5.2	NM	NEG

R&D SCOREBOARD

COMPANY		R&D EXPENSES							SALES				PROFITS			
		STOCK SYMBOL		CHANGE FROM 1990		PER EMPLOYEE				CHANGE FROM 1990		PER EMPLOYEE	R&D AS % OF SALES	CHANGE FROM 1990		R&D AS % OF PROFITS
						1991	1991	AVG	AVG							
		1991 \$ MIL	%	1991 \$	1991 RANK	1987-91 \$	1987-91 RANK	1991 \$ MIL	%	EMPLOYEE \$ THOUS		1991 \$ MIL	%	1991 PROFITS		
Alse Engineering (6)	PLSE	1.5	11	677.9	53	677.9	52	73.9	21	33.1	21	10.4	54	14.5		
Rad-Rite (9)	RDRT	6.2	141	2480.8	44	2480.8	44	177.0	139	70.8	3.5	28.2	312	22.0		
Robinson Nugent (6)	RNIC	1.5**	15	3260.9	40	2811.9	42	53.1	-4	115.4	2.8	0.8	232	183.6		
Tringers	ROG	9.6	11	3208.1	41	2903.5	41	182.4	-4	61.0	5.3	-3.4	NM	NEG		
Seeq Technology (9)	SEEQ	7.1	-20	21313.2	15	18278.6	14	48.6	8	146.3	14.6	-3.2	NM	NEG		
Weldahl (8)	SHEL	1.7	-8	1441.5	48	1196.8	47	86.8	4	74.7	1.9	5.3	-19	31.7		
Terma Semiconductor	SERA	12.5	6	38140.2	3	40698.8	2	85.9	40	262.0	14.6	13.6	378	92.0		
Icon General (6)	SILN	4.5	1	8481.2	29	5878.1	33	62.0	6	116.5	7.3	2.1	79	219.6		
Iconix	SILI	9.2	9	7404.2	31	7932.0	27	140.2	7	112.4	6.6	-5.5	NM	NEG		
Electron (8)	SLR	1.7	13	817.9	51	776.3	50	265.4	30	124.5	0.7	16.4	24	10.6		
Prague Technologies	SPG	1.7	-43	1818.2	45	1874.2	46	294.1	-7	314.5	0.6	-56.8	NM	NEG		
Inward Technologies (6)	SUNT	7.5**	68	4480.0	37	4480.0	36	60.1	43	35.8	12.5	-23.3	NM	NEG		
Max Instruments	TXN	527.0	2	8373.2	30	6983.9	30	6784.0	2	107.8	7.8	-304.0	NM	NEG		
Nitrode (1)	UTR	71	-9	6311.0	34	5273.0	34	107.7	-14	96.2	6.6	-16.4	NM	NEG		
Cor	VICR	3.4	31	6611.4	33	7085.2	29	55.6	51	109.6	6.0	18.3	125	18.3		
Shay Intertechnology	VSH	7.0	0	800.8	52	1019.9	48	442.3	-1	50.8	1.6	27.3	-20	25.6		
LSI Technology	VLS	54.6*	2	23563.7	12	14231.9	21	413.4	27	178.6	13.2	12.8	NM	426.9		
Cor	XICO	23.8	15	23269.1	13	15706.0	18	93.8	3	91.8	25.3	-15.7	NM	NEG		
Linx (3)	XLNX	12.4	65	37442.8	4	34443.1	5	97.6	95	294.1	12.7	25.7	175	48.3		
Log	ZLOG	12.0	16	9152.9	27	8591.3	26	110.1	10	84.2	10.9	15.5	45	77.4		

FOOD

INDUSTRY COMPOSITE		557.9	7	1198.8		2292.3		77693.4	6	167.4	0.7	6504.0	13	8.6
Way (6)		2.3	16	130.9	23	146.0	22	3489.8	-3	199.4	0.1	1.2	-96	1871
American Crystal Sugar (8)		4.9	12	NA	24	NA	24	489.0	14	NA	1.0	7.7	22	63.7
American Maize-Products	AZE.A	3.4	-16	1678.9	7	1234.2	/	533.6	6	265.6	0.6	39.6	-19	8.5
Archer Daniels Midland (6)	ADM	17.7	113	1356.4	10	775.5	13	8468.2	9	649.0	0.2	718.0	-5	2.5
Arden	BN	30.3	-3	682.4	14	623.8	15	7235.1	-5	163.0	0.4	460.9	-20	6.6
Ampbell Soup (7)	CPB	56.3	5	1252.9	12	1014.0	12	6204.1	0	138.1	0.9	674.6	264	8.3
PC International	CPC	39.6	3	1131.4	13	1112.9	11	6189.1	7	176.8	0.6	693.5	9	5.7
Arkalb Genetics (8)	SEEDB	36.7	11	15544.3	2	13125.5	2	275.8	1	116.8	13.3	24.0	-5	152.9
El Monte (6)		9.0	31	461.5	18	461.5	18	1435.0	NA	73.6	0.6	-16.0	NA	NEG
Armland Industries (8)		3.3	-36	430.1	20	373.8	19	3638.1	8	478.7	0.1	50.2	-14	6.5
General Mills (5)	GIS	57.0	18	527.4	17	529.0	17	7153.2	11	66.2	0.8	765.6	25	7.4
Arnaford Bros.	HRD	2.9	24	182.9	22	65.2	23	2007.9	19	125.5	0.1	72.6	4	4.0
Arshery Foods	HSY	22.8	19	1626.4	8	1218.4	8	2899.2	7	207.1	0.8	363.5	1	6.3
Armel (Geo. A.) (10)	HRL	5.7	1	681.6	15	630.6	14	2836.2	6	341.7	0.2	137.9	14	4.1
Arternational Multifoods (2)	IMC	2.2	5	240.7	21	195.5	21	2191.9	6	239.8	0.1	66.2	45	3.3
Arlogg	K	34.7	-9	2039.1	6	2280.5	4	5786.6	12	340.0	0.6	984.2	21	3.5
ArCormick (11)	MCCRK	11.4	13	1485.5	9	1156.7	10	1427.9	8	185.4	0.8	123.7	15	9.2
Arnwest (8)	PENW	3.0	24	7739.6	3	7023.9	3	110.9	21	288.8	2.7	12.5	18	23.7
Arioneer Hi-Bred International (8)	PHYB	78.3	8	16419.9	1	14143.3	1	1124.9	17	235.9	7.0	168.3	37	46.5
Aruaker Oats (6)	OAT	44.3	2	2119.6	5	1771.9	6	5491.2	9	262.7	0.8	411.5	8	10.8
Aralston Purina (9)	RAL	73.6	11	1269.1	11	1173.8	9	7375.8	4	127.2	1.0	647.8	-1	11.4
Arpreckels Industries (6)		1.7	18	614.5	16	548.3	16	412.9	-4	145.1	0.4	-3.3	NM	NEG
Arylvan Foods Holdings	SYLN	0.8	19	433.7	19	370.1	20	82.8	5	42.9	1.0	7.6	-8	11.0
Ariversal Foods (9)	UFC	16.1	18	2717.8	4	2059.5	5	834.3	-5	140.8	1.9	92.3	9	17.4

FUEL

INDUSTRY COMPOSITE		2928.3		B 4094.8		2990.2		371996.9		-5 520.4		0.8 23414.6		-20	12.5
(A) OIL, GAS & COAL															
GROUP COMPOSITE		2266.8		7 4490.6		3079.1		347383.8		-5 688.7		0.7 21666.7		-21	10.5
Aramoco	AN	330.0	8	6097.6	3	5473.4	2	25325.0	-10	467.9	1.3	2035.0	-40	16.2	
Gulfstream Oil (9)	ASH	10.4	-35	315.7	15	411.7	15	9303.0	3	282.8	0.1	192.8	-27	5.4	
Atlantic Richfield	ARC	130.0	-4	4693.1	5	4196.7	6	17037.0	-3	615.1	0.8	1160.0	-59	11.2	
Chevron	CHV	250.0	14	4535.3	7	4314.3	5	36461.0	-6	661.4	0.7	2252.0	-47	11.1	
Exxon	XON	679.0	7	6722.8	1	5847.1	1	102847.0	-3	1018.3	0.7	8685.0	3	7.8	
Marina	F.	10.9	-5	2968.6	9	2630.8	9	3336.4	-16	910.3	0.3	53.6	-72	20.3	
Perr-McGee	KMG	16.0	0	2635.0	10	1897.3	10	3274.0	11	539.2	0.5	166.0	6	9.6	
Mobil	MOB	316.0	15	4681.5	6	3519.5	7	56042.0	-3	830.3	0.6	4025.0	-9	7.9	
Nacco Industries	NC	22.3	7	2262.1	11	1489.2	11	1369.2	-1	138.9	1.6	30.0	-40	74.3	
Occidental Petroleum	OXY	30.0	0	1214.6	12	604.5	14	10096.0	-12	408.7	0.3	986.0	NM	3.0	

R&D SCOREBOARD

COMPANY

STOCK SYMBOL

R&D EXPENSES

CHANGE FROM 1990

1991
\$ MIL

1990
%

1991
\$

1991
RANK

1987-91
AVG
\$

1987-91
RANK

SALES

CHANGE FROM 1990

1991
\$ MIL

1990
%

PER
EMPLOYEE
\$ THOUS.

R&D
AS %
OF
SALES

PROFITS

CHANGE FROM 1990

1991
\$ MIL

1990
%

R&D
AS %
OF
PROFIT

Phillips Petroleum	P	119.0	-6	5246.5	4	5200.3	3	12604.0	-7	555.7	0.9	451.0	-62	26.4
Sun	SUN	15.0	7	884.3	14	850.4	12	10184.0	-9	600.4	0.1	-129.0	NM	NEG
Texaco	TX	250.0	11	6221.8	2	5043.2	4	37271.0	-9	927.6	0.7	1436.0	-34	17.4
Triton Energy (5)	OIL	3.3	-11	NA	16	NA	16	236.2	10	NA	1.4	40.3	NM	8.1
Unocal	UCL	63.0	11	3652.6	8	3172.6	8	9685.0	-9	561.5	0.7	218.0	-57	28.9
USX-Marathon Group	MRO	22.0	16	903.4	13	752.7	13	12313.0	-4	505.6	0.2	65.0	-92	33.8

(B) PETROLEUM SERVICES

GROUP COMPOSITE		661.5	11	3145.9		2883.7		24613.2	7	117.1	2.7	1747.8	0	37.8
Baker Hughes (9)	BHI	51.1	33	2397.8	7	1665.1	7	2828.4	8	132.8	1.8	212.4	18	24.1
Baroid	BRC	14.0	27	2916.7	6	2178.1	5	615.5	18	128.2	2.3	26.5	-24	52.9
BJ Services (9)	BJS	5.8	10	2204.0	8	2095.1	6	390.3	11	148.3	1.5	31.1	8	18.6
CBI Industries	CBH	10.1	14	806.9	12	547.0	13	1607.6	3	128.8	0.6	137.0	11	7.4
Digicon (7)	DGC	3.7	28	3442.9	5	3097.0	4	94.2	6	87.5	3.9	-3.9	NM	NEG
Dresser Industries (10)	DI	13.2	11	415.1	13	619.6	12	4670.0	4	146.9	0.3	238.5	-15	5.5
Halliburton	HAL	117.0	3	1594.0	10	1455.3	9	6975.5	1	95.0	1.7	93.0	-74	125.8
Oceaneering International (3)	OII	4.3	108	3541.7	4	1269.8	11	147.2	-20	122.7	2.9	22.3	49	19.0
Schlumberger	SLB	407.2**	9	7683.7	2	7378.3	2	6145.2	16	115.9	6.6	981.7	41	41.5
Smith International	SII	16.7**	21	6440.0	3	4996.3	3	403.1	4	155.0	4.2	-4.4	NM	NEG
Varco International	VRC	10.8	36	8211.5	1	8734.2	1	216.2	65	165.1	5.0	16.9	72	63.6
Weatherford International	WII	2.3	-16	1138.1	11	1296.7	10	205.8	4	99.7	1.1	-0.3	NM	NEG
Western Co. of North America	WSN	5.3	6	2033.8	9	1541.4	8	314.2	-3	120.6	1.7	-2.8	NM	NEG

10 HEALTH CARE

INDUSTRY COMPOSITE		10006.7	16	14188.2		13830.4		110697.4	13	157.9	9.0	20472.4	16	48.9
--------------------	--	---------	----	---------	--	---------	--	----------	----	-------	-----	---------	----	------

(A) DRUGS & RESEARCH

GROUP COMPOSITE		7283.1	17	18948.1		21410.6		67607.5	12	177.4	10.8	14301.8	9	50.9
A. L. Laboratories	BMD	12.1	21	7137.6	33	4658.1	33	290.5	5	170.9	4.2	7.7	-66	158.6
Allergan	AGN	74.5	8	13303.6	21	11450.2	22	839.3	6	149.9	8.9	-48.2	NM	NEG
Alza	AZA	11.6	15	13842.5	19	26085.9	8	139.7	48	166.8	8.3	-41.4	NM	NEG
American Home Products	AHP	430.5	17	8980.7	29	6963.8	31	7079.4	5	147.7	6.1	1759.8	-4	24.5
Amgen	AMGN	107.4	82	62349.4	4	53161.3	5	682.0	128	395.8	15.8	157.9	551	68.0
Barr Laboratories (6)	BRL	5.9	49	11128.1	27	8615.5	28	94.0	34	177.0	6.3	7.1	362	83.7
Biocraft Laboratories (3)	BCL	6.1	10	8651.4	30	8398.6	29	83.5	-26	119.3	7.3	5.2	24	116.1
Biogen	BGEN	44.3*	23	133812.6	1	96003.3	1	61.4	23	185.6	72.1	7.4	-7	594.8
Bristol-Myers Squibb	BMJ	993.0	13	18560.7	15	14203.1	18	11159.0	8	208.6	8.9	2887.0	14	34.4
Carter-Wallace (3)	CAR	48.9	8	11460.2	25	9437.9	25	634.9	14	148.7	7.7	76.1	1	64.3
Centocor	CNTO	67.4	217	NA	40	NA	40	53.2	-18	NA	126.7	-195.6	NM	NEG
Chiron	CHIR	79.4*	58	52580.8	5	77493.9	2	68.6	31	45.4	115.7	-424.4	NM	NEG
Diagnostic Products	DP	10.3	6	14204.4	18	14413.3	17	90.1	19	124.4	11.4	27.9	14	36.8
E-Z-Em (5)	EZEM	7.1	40	7435.2	32	4878.7	32	75.2	-5	79.3	9.4	0.5	NM	1498.1
Forest Laboratories (3)	FRX	11.4*	20	11385.1	26	9506.1	24	176.3	24	175.4	6.5	54.9	32	20.9
Genentech	GNE	212.9	36	96698.4	2	73937.0	3	459.6	3	208.7	46.3	46.2	NM	461.2
Genetics Institute (11)	GENIZ	45.6	0	77157.3	3	68066.6	4	82.6	104	139.7	55.2	-10.7	NM	NEG
Genzyme	GENZ	10.6	22	13467.7	20	11521.7	21	109.5	118	138.8	9.7	20.6	NM	51.6
ICN Pharmaceuticals	ICN	6.6	31	1045.7	36	3258.6	35	460.4	69	73.1	1.4	31.5	NM	20.9
Immunex	IMIX	20.1	105	38058.8	8	23792.6	10	52.7	71	99.9	38.1	0.8	NM	2500.9
IVAX	IVX	11.0	45	7454.1	31	7610.5	30	181.6	28	123.5	6.0	13.6	NM	80.4
Life Technologies	ITEC	13.0	4	10096.5	28	8807.8	27	171.3	13	133.3	7.6	19.2	-16	67.4
Lilly (Eli)	LLY	766.9	9	24899.4	12	21653.5	12	5725.7	10	185.9	13.4	1879.2	18	40.8
Marion Merrell Dow	MKC	393.0	10	42857.1	7	36445.1	7	2851.0	16	310.9	13.8	896.0	19	43.9
Maxwell Laboratories (7)	MXWL	4.4	25	5558.7	34	3938.9	34	86.3	3	107.9	5.2	3.9	-42	115.0
Medco Containment Services (6)	MCCS	1.1	NA	258.4	39	203.4	39	1342.7	34	305.2	0.1	95.8	708	1.2
Merck	MRK	987.8	16	26201.6	10	22050.4	11	8602.7	12	228.2	11.5	3191.9	17	30.9
Moleculon (6)	MBIO	3.8	NA	15084.0	17	15084.0	15	52.3	NA	209.1	7.2	8.4	NA	44.9
Mylan Laboratories (3)	MYL	6.3	4	12339.2	23	12731.7	20	91.1	-5	178.6	6.9	39.0	21	16.2
Nova Pharmaceutical	NOVX	12.4	13	48674.5	6	38976.4	6	48.5	48	190.2	25.6	-14.9	NM	NEG
Perrigo (6)	PRGO	1.6	3	777.8	38	777.8	37	281.3	14	139.8	0.6	19.3	55	8.1
Pfizer	PFE	756.8	18	17161.0	16	13249.0	19	6950.0	9	157.6	10.9	943.7	-14	80.2
Rhone-Poulenc Rorer	RPR	444.5	27	19755.6	14	14450.7	16	3841.0	31	170.7	11.6	485.9	NM	91.5
Scherer (R. P.) (3)	SHR	9.0	7	2558.6	35	2294.5	36	350.4	14	100.1	2.6	18.1	NM	49.5
Schering-Plough	SGP	425.9	12	21084.1	13	16106.8	14	3615.6	9	179.0	11.8	860.8	12	49.5

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		1991 \$ MIL	CHANGE FROM 1990 %	PER EMPLOYEE				1991 \$ MIL	CHANGE FROM 1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	1991 \$ MIL	CHANGE FROM 1990 %	R&D AS % OF PROFITS
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
1) PHARMACEUTICALS (11)														
Amgen (7)	SPI	4.9	322	875.2	37	771.7	38	364.4	159	65.1	13	52.8	131	9.3
Baxter (7)	SYN	315.6	17	28954.1	9	24258.7	9	1816.9	19	166.7	17.4	476.2	26	66.3
Boehringer	UPJ	491.1	15	25585.6	11	20827.1	13	3426.3	13	178.5	14.3	720.2	10	68.2
Boehringer-Lambert	WLA	423.2	12	12447.1	22	9556.9	23	5059.0	8	148.8	8.4	221.5	-67	191.1
Boehringer Laboratories	ZENL	5.1	44	11672.0	24	8931.1	26	57.5	8	131.8	8.9	0.9	-69	547.8
2) MEDICAL PRODUCTS & SERVICES														
GROUP COMPOSITE		2723.6	15	8506.6		6773.0		43089.9	13	134.7	6.3	6170.6	35	44.1
Abbott Laboratories	ABT	666.3	18	14582.6	5	12216.2	6	6876.6	12	150.5	9.7	1544.2	14	43.2
Amgen	ACN	32.7	22	23133.1	1	20779.0	2	336.3	19	238.0	9.7	93.2	21	35.1
ADAC Laboratories (9)	ADAC	6.6	5	14756.7	4	14431.4	4	101.2	34	226.0	6.5	1.0	-71	661.8
Advanced Medical	AMA	9.8	7	NA	48	NA	48	127.1	38	NA	7.7	-12.4	NM	NEG
Applied Healthcare Products (6)	AHPI	0.9	9	1728.0	39	1728.0	40	54.6	9	109.2	1.6	6.8	70	12.7
ASCO International	ASZ	10.8	5	3398.7	32	3411.1	31	405.2	21	127.1	2.7	47.0	65	23.0
Bard (C. R.)	BCR	55.6	26	6109.9	22	4578.9	23	876.0	12	96.3	6.3	76.9	31	72.3
Bausch & Lomb	BOL	49.3	3	3595.3	30	3375.6	32	1520.1	11	111.0	3.2	149.5	-26	32.9
Baxter International	BAX	289.0	11	4385.4	28	3837.0	28	8921.0	10	135.4	3.2	830.0	667	34.8
Becton, Dickinson (9)	BDX	113.0	10	6077.7	23	5095.9	22	2172.2	8	116.8	5.2	267.3	-2	42.3
Bomet (5)	BMET	12.9	30	8587.1	18	7833.8	18	209.7	29	139.9	6.1	58.6	34	22.0
Bicon	CCON	6.0	16	8681.6	17	7677.3	19	68.9	26	99.3	8.7	4.9	324	123.7
Collagen (6)	CGEN	9.0	5	19381.0	2	22043.7	1	61.4	23	132.9	14.6	8.6	-26	104.1
Cordis (6)	CORD	14.7	18	6995.2	21	6067.2	21	198.9	22	94.7	7.4	26.0	81	56.6
Datascope (6)	DSCP	11.7	5	10216.5	12	8456.7	16	135.5	13	117.8	8.7	12.5	-12	94.2
Danisco	DIA	18.3	11	11214.1	9	11827.4	7	286.5	7	175.2	6.4	21.8	12	84.0
Eastman Imaging	FIMG	4.5*	-2	8462.4	19	8462.4	15	57.6	30	108.2	7.8	3.5	NM	128.5
Eastman Kodak USA	FRN	1.1	11	1706.2	41	2579.3	36	101.4	32	156.1	1.1	-2.8	NM	NEG
Eastman Kodak (3)	HAE	8.4	45	9085.6	15	9085.6	13	157.3	27	170.5	5.3	20.9	24	40.1
Eastman Kodak	HDYN	2.2	41	876.9	46	970.1	45	191.4	38	75.1	1.2	21.8	49	10.3
Eastman International (10)	HEN	0.7	35	842.1	47	842.1	47	45.3	67	56.8	1.5	2.5	40	27.3
Eastman Group (6)	IMA	80.8	7	8244.9	20	7900.5	17	1633.9	15	166.7	4.9	153.3	77	52.7
Eastman Spec (11)	ISPC	7.2	-17	12473.1	7	14853.1	3	61.5	-5	106.7	11.7	9.3	NM	77.1
Eastman Vacare	IVCR	4.5**	35	1851.6	38	1698.9	41	263.2	15	107.9	1.7	22.9	65	19.7
Eastman & Johnson	JNJ	980.0	18	11850.1	8	9365.7	11	12447.0	11	150.5	7.9	2038.0	26	48.1
Eastman Medical	KMDC	2.3	14	4425.8	27	3705.7	29	71.2	12	137.2	3.2	4.4	NM	52.2
Eastman Medical Products (3)	MMPI	0.9	-4	995.7	44	871.6	46	81.9	13	88.2	1.1	2.4	-45	37.8
Eastman Electronics (4)	MARQA	14.1	-4	8999.4	16	8999.4	14	208.0	10	133.0	6.8	16.9	-11	83.3
Eastman (3)	MDTC	3.4	-1	3189.3	34	2992.8	35	108.3	5	103.0	3.1	1.7	193	200.1
Eastman (6)	MDEX	2.1	26	1926.4	37	2086.9	37	65.5	46	59.5	3.2	7.9	26	26.7
Eastman (4)	MDT	89.5	10	10564.9	11	10105.2	10	1021.4	18	120.6	8.8	196.2	17	45.6
Eastman (3)	MNTR	4.8	70	5619.8	24	3892.6	27	73.8	46	85.8	6.6	8.9	-29	54.4
Eastman Safety Appliances	MNES	19.6	10	3495.5	31	3057.8	34	500.7	6	89.4	3.9	35.0	-32	56.0
Eastman (6)	NELL	14.0**	7	11103.3	10	11766.4	8	158.9	11	126.2	8.8	25.8	13	54.2
Eastman Institute	LABA	3.0	10	900.0	45	1089.6	44	236.3	35	71.6	1.3	6.4	-45	46.1
Eastman Optical Radiation (7)	ORCO	5.2	2	3281.5	33	3230.4	33	145.7	12	92.8	3.5	17.7	71	29.1
Eastman-Bennett	PBEN	24.1	23	9982.2	13	7278.5	20	256.1	2	105.9	9.4	-2.7	NM	NEG
Eastman Life Systems (2)	SMLS	5.8	75	5229.1	25	4303.7	25	111.8	66	101.6	5.1	45.7	75	12.6
Eastman Jude Medical	STJM	8.1	28	13539.2	6	11071.2	9	209.8	20	350.3	3.9	112.7	30	7.2
Eastman Tryker	STRY	23.7**	21	9682.6	14	9220.7	12	364.8	30	149.0	6.5	53.3	40	44.4
Eastman Medical (6)	SNMD	4.2	17	2270.6	35	1843.4	39	203.8	18	109.9	2.1	13.7	49	30.8
Eastman Technology (7)	SURV	1.0	25	1724.3	40	3479.7	30	46.7	132	84.1	2.1	3.1	NM	31.3
Eastman Acquisition (9)		6.8	0	1945.8	36	1976.2	38	350.1	7	99.8	1.9	17.1	80	40.0
Eastman Medical Products (11)	TCNI	0.8	8	1337.4	42	1337.4	43	55.2	17	96.6	1.4	13.5	36	5.7
Eastman Medical	TKOS	1.5	-39	1159.2	43	1523.1	42	115.2	45	88.6	1.3	9.6	NM	15.6
Eastman S. Surgical	USS	30.6	46	4195.9	29	4509.9	24	843.6	64	115.6	3.6	130.3	97	23.5
Eastman Vital Signs (9)	VITL	2.1	35	4464.6	26	4104.1	26	46.6	21	97.0	4.6	11.7	53	18.4
Eastman International	WMRK	60.1	5	16590.7	3	13132.0	5	504.7	4	139.3	11.9	34.0	32	176.6
3) HOUSING														
INDUSTRY COMPOSITE		484.5	1	2741.6		2869.6		26295.6	-3	148.8	1.8	-280.4	NM	NEG
Adience		1.7	-15	819.8	21	900.8	20	169.6	-9	83.8	1.0	-10.7	NM	NEG
Ameron (11)	AMN	2.5	-17	862.1	19	1046.0	17	465.1	4	160.4	0.5	12.7	-28	19.7
ASI Holding		36.0**	-3	1125.0	15	1208.8	14	3595.3	-1	112.4	1.0	-87.8	NM	NEG

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL	1991 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 \$ MIL	R&D AS % OF PROFIT		
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
Green (A. P.) Industries	APGI	2.5	4	1527.2	12	1328.0	12	170.3	-9	104.0	1.5	-7.8	NM	NEG
Guardsman Products	GPI	5.2	-15	6829.6	3	5710.0	4	140.9	1	186.2	3.7	1.9	-55	277.2
Lafarge	LAF	7.5	10	903.6	18	1011.6	19	1568.8	-11	189.0	0.5	-34.3	NM	NEG
Lill Industries (11)	LICIA	10.6	-2	9303.5	1	8039.9	1	213.3	-8	187.1	5.0	10.8	-36	98.4
Manville	MVL	33.7	-4	2106.3	11	2000.1	11	2025.4	-5	126.6	1.7	-8.2	NM	NEG
Middleby	MBY	1.4	38	1523.7	13	1128.0	16	103.0	-9	113.3	1.3	-7.5	NM	NEG
Moore (Benjamin)	MBEN	11.3**	13	5870.6	6	5019.4	5	463.0	1	240.5	2.4	60.2	-5	18.8
Owens-Corning Fiberglas	OCF	43.0	-7	2687.5	8	2153.5	10	2783.0	-9	173.9	1.5	-753.0	NM	NEG
PPG Industries	PPG	220.4	1	6540.1	4	6345.0	3	5672.6	-6	168.3	3.9	353.5	-55	62.3
Pratt & Lambert	PM	6.9	6	4385.9	7	3744.5	7	239.0	-2	151.4	2.9	7.9	-15	87.1
RPM (5)	RPOW	6.5	19	2596.0	10	2596.0	8	500.3	10	200.1	1.3	51.7	13	12.6
Scotsman Industries	SCT	2.8	-3	2604.7	9	2500.6	9	164.1	-9	152.7	1.7	0.9	-92	299.1
Sherwin-Williams	SHW	18.4	-10	1102.2	16	1043.2	18	2541.4	12	152.3	0.7	198.8	6	9.2
TJ International	TJCO	1.9	9	635.3	22	844.5	21	283.2	-14	94.4	0.7	-12.4	NM	NEG
Tokheim (11)	TOK	14.9**	21	6287.5	5	4595.6	6	192.6	-11	81.5	7.7	-19.1	NM	NEG
USG	USG	12.0	-14	1016.9	17	1285.5	13	1712.0	-11	145.1	0.7	-194.0	NM	NEG
Valspar (10)	VAL	23.2	14	9180.2	2	7496.4	2	632.6	11	250.0	3.7	45.8	4	50.7
Vulcan Materials	VMC	5.4	-11	843.4	20	815.3	22	1007.5	-9	157.3	0.5	73.4	-59	7.4
York International	YRK	16.8	23	1460.9	14	1163.8	15	1652.7	14	143.7	1.0	36.8	35	45.7

12 LEISURE TIME PRODUCTS

INDUSTRY COMPOSITE		1957.3	10	8203.8		4501.3		34479.8	2	144.0	5.7	1343.3	-25	145.7
Anthony Industries	ANT	2.9	-12	878.8	21	828.1	22	370.3	-2	112.2	0.8	10.7	139	27.2
Arctco (3)	ACAT	2.0	20	NA	23	NA	23	151.9	9	NA	1.4	20.3	2	10.1
Brunswick	BC	52.5	-9	2692.3	13	2582.1	12	2088.3	-16	107.1	2.5	-22.2	NM	NEG
Coachmen Industries	COA	2.3	-24	1118.0	19	1248.2	19	231.4	-15	112.9	1.0	-13.3	NM	NEG
Cohu	COH	2.1	16	4082.5	7	4044.9	6	48.2	10	92.5	4.4	4.3	-1	49.8
Concord Camera (6)	LENS	0.6	194	3471.9	10	2058.9	14	48.5	71	272.2	1.3	2.9	NM	21.4
Eastman Kodak	EK	1494.0	12	11216.2	3	9213.1	3	19419.0	3	145.8	7.7	11.0	NM	NM
Fisher-Price	FPP	13.8	-31	2379.3	15	2559.5	13	601.0	-14	103.6	2.3	-44.5	NM	NEG
Fleetwood Enterprises (4)	FLE	12.2**	-5	1109.1	20	1044.2	21	1400.9	-10	127.4	0.9	46.6	-46	26.2
Galooob (Lewis) Toys	GAL	6.3	-19	23768.1	1	20433.5	1	150.6	19	572.8	4.2	-7.5	NM	NEG
Harley-Davidson	HDI	11.1	17	2094.3	16	1678.5	18	939.9	9	177.3	1.2	58.1	-7	19.1
Harman International Industries (6)	HAR	8.4**	10	1900.9	18	1914.3	17	586.9	5	132.3	1.4	-20.6	NM	NEG
Hasbro	HAS	79.0**	27	7522.2	4	7754.9	4	2141.1	41	203.9	3.7	145.6	-5	54.3
Johnson Worldwide Associates (9)	JWAIA	6.4	13	3128.2	12	3023.9	11	310.8	17	152.1	2.1	19.8	-28	32.2
Lumex	LUM	3.9	-16	3553.0	9	3676.1	9	100.3	13	92.5	3.8	5.6	NM	68.9
Mattel	MAT	48.0	11	3836.8	8	3271.2	10	1621.7	10	129.7	3.0	188.9	36	25.4
Outboard Marine (9)	OM	40.8	-6	5037.0	6	3969.6	7	983.6	-14	121.4	4.1	-105.9	NM	NEG
Polaroid	PRD	153.8**	8	12813.5	2	12028.6	2	2070.6	5	172.5	7.4	1083.2	397	14.2
Revell-Monogram	RVL	2.6	-10	3407.3	11	3825.7	8	106.2	23	138.6	2.5	5.4	249	48.7
SLM International	SLMI	2.1	24	1962.9	17	1962.9	16	164.2	24	156.4	1.3	8.9	NM	23.2
SPI Holdings		1.9	-7	2522.7	14	1997.3	15	173.1	14	224.5	1.1	-58.5	NM	NEG
Tyco Toys	TTI	9.0	-6	5301.8	5	4187.4	5	548.7	19	322.8	1.6	27.2	911	33.1
Winnebago Industries (8)	WGO	1.6	97	719.8	22	1147.5	20	222.6	-33	98.1	0.7	-22.4	NM	NEG

13 MANUFACTURING

INDUSTRY COMPOSITE		3379.3	4	3827.0	3563.5	117242.1	-2	132.7	2.9	4749.0	-37	71.2		
(A) GENERAL MANUFACTURING														
GROUP COMPOSITE		1547.8	5	4245.3	2344.2	47860.8	2	131.3	3.2	3569.9	-16	43.4		
Alliant Techsystems (3)	ATK	37.3	-5	4906.2	5	4906.2	4	1247.7	-1	164.2	3.0	33.6	-42	111.1
Allied Research	ARAI	1.2	18	2162.7	26	2833.9	16	174.7	241	322.9	0.7	18.0	NM	6.5
American Filtrona	AFIL	3.6**	-2	3250.9	16	3256.4	14	144.0	0	130.9	2.5	11.4	3	31.4
Avery Dennison	AVY	48.7	-9	2848.8	19	2737.5	18	2545.1	-2	148.9	1.9	104.8	572	46.5
Bally Gaming International	BGI	5.0	-44	6700.0	2	6700.0	2	148.0	-9	199.9	3.4	10.8	NM	46.0
Bic	BIC	4.6	47	2017.0	32	1845.6	29	369.2	12	160.5	1.3	46.6	14	10.0
Blessings	BCO	1.2	10	1776.9	34	2114.3	25	111.5	2	171.5	1.0	13.9	1	8.3
Blount (2)	BLTA	7.4	17	1608.7	35	1549.1	35	672.7	-2	146.2	1.1	1.8	-90	406.6
Brady (W. H.) (7)	BRCOA	9.2	25	4648.4	8	3777.7	9	211.1	10	106.9	4.3	22.5	-12	40.9
Carlisle	CSL	10.4	10	2137.6	29	2787.0	17	500.8	0	102.7	2.1	10.6	-74	98.7
Central Sprinkler (10)	CNSP	2.2	22	5446.3	3	3862.7	8	62.3	-12	152.0	3.6	4.7	-51	47.8

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 \$ MIL.	1990 %	R&D AS % OF PROFITS
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
ing	GLW	130.7	5	4257.3	10	4025.9	7	3286.8	10	107.1	4.0	439.1	1	29.8
ar	CSTR	2.6**	55	4721.9	7	3296.6	13	62.8	16	111.9	4.2	7.4	19	35.8
ne	CR	18.6**	9	2066.7	31	1433.7	37	1302.5	-9	144.7	1.4	72.4	-29	25.7
nelly (6)	DON	12.5	5	5389.8	4	5303.0	3	232.8	9	100.4	5.4	5.7	203	217.5
acell International (6)	DUR	17.0	13	2151.9	28	1758.8	32	1524.1	14	192.9	1.1	64.7	244	26.3
le Industries (7)		5.3	8	449.2	49	665.8	45	1187.7	2	100.7	0.4	0.7	-96	757.1
Industries (6)	ELCN	2.0	18	1222.0	40	832.9	44	156.4	4	97.3	1.3	1.5	-80	135.1
f (9)	ESSF	2.3**	-4	3693.7	13	2635.6	20	95.9	8	152.2	2.4	3.4	NM	68.0
child (6)	FA	4.4	-1	919.8	44	461.4	48	515.7	-25	107.4	0.9	34.9	NM	12.6
Brands (6)	FBR	8.8	2	2375.8	22	2434.1	22	1073.0	-1	290.6	0.8	84.2	-7	10.4
n (1)	FCBN	6.1**	17	2322.3	23	1437.2	36	306.2	-6	116.1	2.0	-27.8	NM	NEG
at American Management (7)	GAMI	5.3	8	434.4	50	382.2	51	1280.7	-3	105.0	0.4	4.5	-85	117.8
Idle Environmental Systems	GUN	1.1	32	1339.8	36	1087.3	41	134.9	12	162.6	0.8	13.1	47	8.5
sco	HSC	3.6	4	347.3	51	630.1	46	1943.1	10	185.1	0.2	119.6	4	3.0
cel	HXL	10.6	4	3466.4	15	3382.5	12	386.6	1	126.3	2.7	4.4	32	241.2
hear Industries (5)	HSI	1.5**	21	1336.6	37	2306.6	23	104.9	26	93.1	1.4	11.2	2	13.5
anbrand Industries (11)	HB	23.7	0	2255.5	25	2195.1	24	1198.9	8	114.2	2.0	145.7	15	16.3
ois Tool Works	ITW	40.3	0	2155.1	27	2021.4	26	2639.7	4	141.2	1.5	287.8	-4	14.0
rnational Game Technology (9)	IGT	9.4	18	4179.0	12	4411.2	6	237.4	13	106.0	3.9	48.1	53	19.5
all	LDL	4.1	28	4329.5	9	3398.0	11	135.5	10	143.1	3.0	13.3	1	30.8
rk Controls	MCCC	1.5	26	2464.4	20	1600.3	34	92.9	14	157.5	1.6	5.3	26	27.5
rk IV Industries (2)	IV	24.0	16	2108.1	30	1875.8	28	937.3	13	82.2	2.6	38.6	-10	62.2
terial Sciences (2)	MSC	1.5	15	2283.1	24	2543.8	21	139.5	-9	212.3	1.1	7.8	NM	19.2
nesota Mining & Mfg.	MMM	914.0	6	10330.4	1	8965.5	1	13340.0	2	150.8	6.9	1877.0	-12	48.7
lear Metals (9)	NUCM	1.4	98	2975.9	18	1891.3	27	48.3	1	105.8	2.8	2.3	87	59.2
ullivan	OSL	1.3	27	680.5	47	506.9	47	196.4	-1	103.4	0.7	2.4	-90	53.8
Dri Corp. of America (7)	OILC	1.2	12	1818.2	33	1645.9	33	102.3	9	155.0	1.2	9.2	0	13.1
ker Hannifin (6)	PH	22.0	-21	789.8	45	999.7	43	2440.8	0	87.8	0.9	103.5	-44	21.2
n Engineering & Mfg.	PNN	0.9	-6	1127.8	41	1051.8	42	70.8	1	87.9	1.3	6.3	6	14.4
xote (6)	QUIX	4.8	88	4821.9	6	4572.1	5	111.8	70	113.2	4.3	3.5	-53	134.8
ertson Ceco	RHH	2.0	-7	476.9	48	391.5	50	651.5	18	151.9	0.3	-107.0	NM	NEG
bermaid	RBD	23.2	33	2382.5	21	1792.5	31	1667.3	9	170.9	1.4	262.6	14	8.9
iled Air	SEE	9.9	41	3565.3	14	2893.8	15	435.1	5	157.1	2.3	31.5	29	31.4
i Technologies	ST	6.0	-19	1265.2	39	1165.0	39	374.5	-15	79.5	1.6	10.7	NM	55.6
degar Industries	TG	4.5	-6	1297.4	38	1111.9	40	474.0	-13	135.4	1.0	8.9	NM	51.2
ova	TNV	74.9**	-1	4230.7	11	3557.1	10	1681.2	-14	95.0	4.5	-195.3	NM	NEG
mont Industries	VALM	3.0	50	694.4	46	444.1	49	429.7	-4	99.5	0.7	-12.3	NM	NEG
ittaker (10)	WKR	1.1	-21	1100.0	43	1843.1	30	158.5	2	158.5	0.7	18.7	716	5.9
AS Industries (6)	WMS	6.7	-5	3055.9	17	2678.3	19	161.2	11	73.2	4.2	9.5	NM	71.0
man-Gordon	WYMN	3.3	-18	1111.0	42	1349.2	38	355.4	-12	118.5	0.9	-125.8	NM	NEG
MACHINE & HAND TOOLS														
GROUP COMPOSITE		302.6	4	2453.6		2206.2		14705.9	-4	119.2	2.1	336.2	-58	90.0
ne-Cleveland (9)	AMT	1.5	-6	663.6	19	690.4	19	183.9	-8	81.9	0.8	5.5	-20	26.9
st Lock		1.3	19	1323.7	16	904.3	17	75.1	0	77.6	1.7	6.3	2	20.4
ick & Decker	BDK	90.3	4	2340.6	12	2073.8	11	4637.0	-4	120.1	1.9	107.5	-13	84.0
own & Sharpe Mfg.	BNS	11.4	12	5682.0	1	4493.5	1	175.8	0	87.9	6.5	-3.6	NM	NEG
icinnati Milacron	CMZ	35.8	4	5458.1	2	4461.5	2	754.0	-6	115.0	4.7	-73.4	NM	NEG
rk Equipment	CKL	27.7**	-12	3448.3	7	2904.3	6	1190.2	-18	148.2	2.3	-97.6	NM	NEG
naher	DHR	15.1	13	2116.9	13	1716.8	14	836.3	-1	117.2	1.8	26.3	-58	57.3
ddings & Lewis	GIDL	1.6	20	323.3	20	430.4	20	326.6	34	67.9	0.5	30.1	14	5.2
ason	GLE	6.4	18	3734.5	6	2442.9	8	177.5	1	104.1	3.6	4.6	-53	140.0
ster-Yale Materials Handling		20.0**	11	4433.6	3	3067.7	4	790.6	-14	175.3	2.5	-0.5	NM	NEG
nnametal (6)	KMT	14.8	11	2751.9	9	2292.0	10	617.8	5	115.3	2.4	38.4	-30	38.4
coln Electric	LIEL	21.3	29	3273.1	8	2940.6	5	833.9	5	128.1	2.6	34.4	13	61.9
st-Coil Systems (5)	METS	1.8	-9	3747.4	5	3373.0	3	47.7	-18	100.4	3.7	-5.3	NM	NEG
onarch Machine Tool	MMO	1.7	-31	2059.2	14	1739.8	13	106.1	-8	128.2	1.6	3.0	308	57.4
ymond	RAYM	4.4	5	3854.0	4	2703.6	7	138.8	-5	122.1	3.2	-2.5	NM	NEG
le Industries (8)	RULE	0.9**	19	1770.8	15	1572.2	15	52.0	-2	105.5	1.7	-4.2	NM	NEG
ap-on Tools	SNA	16.6**	8	2436.6	11	2031.0	12	938.5	-5	138.0	1.8	118.5	-26	14.0

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990 %	1991 \$ MIL.	1991 PR	
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
SPX	SPW	13.1	-17	2571.2	10	2385.7	9	673.5	-5	132.1	1.9	-25.2	NM	N
Stanley Works	SWK	13.9	5	797.9	18	759.2	18	1962.2	-1	112.6	0.7	156.5	-9	
Starrett (L. S.) (6)	SCX	3.3	2	1225.8	17	976.6	16	188.4	-7	71.0	1.7	173	-39	1
(C) SPECIAL MACHINERY														
GROUP COMPOSITE		1475.0	2	4414.9		5726.5		49215.2	-6	147.2	3.0	871.4	-66	169
Applied Materials (10)	AMAT	102.7**	6	28976.9	4	26531.7	4	638.6	13	180.2	16.1	40.4	-25	251
Applied Power (8)	APWRA	6.5	-7	2027.3	41	2365.6	31	434.0	-3	134.8	1.5	16.9	-51	38
Astec Industries	ASTE	2.5	31	2533.4	32	2002.6	36	134.5	0	136.1	1.9	0.6	NM	42
Baldwin Technology (6)	BLD	6.4	33	4905.4	21	3682.6	23	221.3	21	170.2	2.9	171	-29	3
BE Holdings		3.9	0	3401.9	24	3750.2	22	249.1	3	220.0	1.5	-13.4	NM	N
Binks Mfg. (11)	BIN	3.3	35	1984.3	42	1407.0	43	222.2	-20	133.8	1.5	2.3	-79	149
Briggs & Stratton (6)	BGG	7.9	11	1095.8	49	1123.3	47	950.7	-5	131.3	0.8	53.0	-1	15
BWIP Holding	BWIP	7.2	49	2327.1	33	1593.5	39	430.4	14	138.8	1.7	48.4	18	14
Caterpillar	CAT	272.0	14	5071.2	20	3818.6	21	10182.0	-11	189.8	2.7	-556.0	NM	N
CMI	CMX	3.0**	-43	4622.9	22	5841.3	15	66.4	-7	101.3	4.6	-4.3	NM	N
Commercial Intertech (10)	TEC	6.2	-13	1608.0	43	1570.7	40	437.0	-4	113.2	1.4	36.2	-29	1
Deere (10)	DE	279.3**	6	7658.6	11	6358.6	11	6926.2	-10	189.9	4.0	-25.4	NM	N
Dover	DOV	62.5	0	3305.0	25	2828.9	26	2195.8	-1	116.2	2.8	204.1	-16	30
Duriron	DURI	6.8	14	2758.8	29	2278.5	33	296.5	0	121.0	2.3	31.1	-7	21
Farr	FARC	3.2**	16	2540.8	31	2426.8	30	112.4	32	89.0	2.9	-4.5	NM	N
Farrel (4)	FARL	2.0	59	NA	54	NA	54	104.7	-14	NA	1.9	5.5	188	37
FMC	FMC	134.6	-15	5816.2	16	5969.4	14	3899.4	5	168.4	3.5	259.0	21	52
Gehl	GEHL	1.8	-7	1606.1	44	1462.2	42	127.3	-27	110.7	1.5	-25.4	NM	N
General Signal	GSX	96.0	-7	6511.5	14	6074.4	13	1610.8	-5	109.3	6.0	89.5	NM	107
Genus	GGNS	9.7	-18	37563.7	1	32342.9	1	51.5	5	199.0	18.9	-4.0	NM	N
GEO International (9)	GX	1.1	-23	2154.1	39	869.4	49	84.7	-31	163.2	1.3	-22.0	NM	N
Gerber Scientific (4)	GRB	22.3	8	13125.3	8	13125.3	6	268.4	13	157.9	8.3	12.3	-75	182
Goulds Pumps	GULD	6.1	7	1402.3	45	1308.3	44	566.6	2	130.2	1.1	51.3	6	11
Graco	GGG	12.0	2	5571.6	18	5063.6	18	311.9	-3	145.1	3.8	15.3	-47	78
Harnischfeger Industries (10)	HPH	24.7	8	2128.6	40	1760.8	38	1603.5	-10	138.2	1.5	125.5	-5	19
Hein-Werner	HNW	2.1	0	3078.0	26	2621.0	28	85.1	-17	127.5	2.4	-6.4	NM	N
Helix Technology	HELX	2.4	10	7137.0	12	5768.6	16	55.8	6	162.6	4.4	4.8	161	50
Ingersoll-Rand	IR	123.8**	-3	3978.5	23	3601.3	24	3586.2	-4	115.3	3.5	235.2	-18	52
Interlake	IK	3.8	-12	775.2	51	893.2	48	714.7	-9	145.8	0.5	0.4	NM	889
Ionics	ION	2.9**	12	2886.0	28	2695.8	27	138.1	8	138.1	2.1	11.6	81	24
JLG Industries (7)	JLGI	3.4**	-3	2901.9	27	2528.2	29	94.4	-37	79.9	3.6	-6.4	NM	N
Joy Technologies (2)	JOY	1.4	3	298.1	53	540.7	52	657.4	19	139.9	0.2	40.9	NM	3
Kulicke & Soffa Industries (9)	KLIC	14.3	35	14119.5	6	10162.3	8	100.2	-3	98.9	14.3	-1.6	NM	N
Lam Research (6)	LRCX	28.8	8	31734.6	3	30771.3	3	144.0	2	158.6	20.0	8.1	NM	356
Manitowoc (6)	MANT	2.5	-4	1158.2	47	1141.3	46	236.2	7	107.4	1.1	20.5	-33	12
Newcor (10)	NEWC	5.6**	4	12092.5	9	10058.5	9	98.7	24	212.4	5.7	7.3	406	76
Nordson (10)	NDSN	18.0	2	6366.8	15	6284.0	12	388.0	12	137.2	4.6	52.0	16	34
Novellus Systems	NVLIS	9.1	1	34517.0	2	30806.2	2	80.0	19	301.9	11.4	25.4	17	36
Oilgear	OLGR	1.9	4	2261.8	36	1882.1	37	66.0	-10	77.9	2.9	1.1	-61	181
Osmonics	OSMO	2.9**	16	5248.7	19	4640.8	20	46.7	7	83.6	6.3	5.8	7	50
Package Machinery	PKGM	4.6**	18	13731.3	7	9248.7	10	50.2	27	149.7	9.2	2.7	NM	173
Pentair	PNTA	9.4	11	1119.0	48	699.8	51	1169.1	-1	139.2	0.8	74.1	29	12
Rex-PT Holdings (6)		4.6	8	857.2	50	751.6	50	552.0	-3	103.5	0.8	32.9	6	13
Roper Industries (10)	ROPR	1.3	85	2157.0	38	2157.0	34	75.0	57	121.4	1.8	7.9	64	170
Shopsmith (3)	SHOP	0.6	1	1204.6	46	1154.9	45	49.2	-4	103.8	1.2	0.2	-60	292
Silicon Valley Group (9)	SVGI	30.0**	19	16613.5	5	16224.5	5	234.8	27	130.0	12.8	3.3	-58	898
Stevens Graphics	SVG.A	1.6	-63	2556.1	30	3079.3	25	78.9	-33	128.4	2.0	-16.4	NM	N
Tennant	IANT	10.0**	7	5767.0	17	4869.4	19	198.6	-6	114.3	5.0	18.5	-7	54
Timken	TKR	40.9	2	2305.8	35	2099.1	35	1647.4	-3	92.9	2.5	-42.0	NM	N
Twin Disc (6)	TDI	9.9**	8	6672.3	13	5669.7	17	153.0	-6	103.2	6.5	-3.1	NM	N
Tyco Laboratories (6)	TYC	13.3	57	538.2	52	538.2	53	3107.9	NA	125.8	0.4	189.1	NA	70
Varity (1)	VAT	38.1	-22	2174.3	37	1498.8	41	3169.1	-12	180.9	1.2	-165.1	NM	N
Wheatley TXT (2)	WTXT	1.5**	NA	2322.2	34	2322.2	32	67.0	NA	106.4	2.2	4.0	NA	36
Zebra Technologies	ZBRA	2.4	13	11805.0	10	11805.0	7	45.6	20	228.1	5.2	13.3	25	17

R&D SCOREBOARD

IPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990		PER EMPLOYEE				CHANGE FROM 1990		PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	CHANGE FROM 1990		R&D AS % OF PROFITS
		1991 \$ MIL.	%	1991 \$	1991 RANK	AVG 1987-91 \$	AVG. 1987-91 RANK	1991 \$ MIL.	%			1991 \$ MIL.	%	
TEXTILES														
UP COMPOSITE		53.9	4	884.8		1663.5		5460.4	-3	89.6	1.0	-28.4	NM	NEG
ny International	AIN	18.5	3	3226.0	3	2648.2	3	559.7	0	97.7	3.3	19.4	41	95.3
ington Industries (9)	BUR	9.7	1	404.2	9	404.2	9	1925.8	-6	80.2	0.5	-67.8	NM	NEG
fab (6)	CMFB	1.7	20	4347.1	1	3630.1	1	51.1	5	132.4	3.3	8.2	63	20.4
ard Fabrics (8)	CIS	3.3	32	4285.7	2	3256.9	2	197.8	1	256.9	1.7	1.3	-81	249.1
n Crafts (3)	CRW	2.2	21	1469.3	7	1061.5	7	121.9	19	81.3	1.8	10.5	1	21.0
(4)	DWG	1.7	10	95.8	10	101.3	10	1215.3	-1	69.4	0.1	-33.8	NM	NEG
ndustries (11)	FIT	3.4	-1	1766.8	5	1620.1	5	185.6	11	97.7	1.8	23.1	46	14.5
ord Mills (6)	GFD	8.5	6	2466.6	4	1842.9	4	528.8	-3	153.4	1.6	20.1	NM	42.4
on Industries (9)	HRZN	3.4	1	1476.5	6	1273.9	6	278.4	-9	121.0	1.2	-2.0	NM	NEG
n Carpet Mills	SLCR	1.6	-25	478.8	8	539.2	8	396.0	-10	116.5	0.4	-7.4	NM	NEG
METALS & MINING														
ISTRY COMPOSITE		428.5	8	2134.3		1607.2		33427.5	-9	166.5	1.3	136.0	-96	315.2
ALUMINUM														
UP COMPOSITE		312.1	11	2622.0		1731.2		19869.5	-6	166.9	1.6	830.5	-58	37.6
inum of America	AA	251.9	14	3839.9	1	3260.7	1	9884.1	-8	150.7	2.5	400.4	-62	62.9
er Aluminum	KLU	11.4	-1	1110.0	3	1150.0	3	2000.8	-5	194.8	0.6	142.4	-52	8.0
xam	MXM	11.4	-1	929.9	4	828.8	4	2254.5	-5	183.9	0.5	67.4	-70	16.9
olds Metals	RLM	37.4	1	1210.4	2	1156.1	2	5730.1	-5	185.4	0.7	220.3	-48	17.0
STEEL														
UP COMPOSITE		74.3	-3	1534.4		1827.6		9288.1	-15	191.7	0.8	-1050.6	NM	NEG
gheny Ludlum	ALS	7.4	-10	1379.1	4	1465.4	4	1004.6	-7	186.0	0.7	72.4	-34	10.3
co	AS	25.8	-2	2804.3	2	2043.2	3	1595.3	-8	173.4	1.6	-336.4	NM	NEG
enter Technology (6)	CRS	9.2	8	2592.3	3	2505.0	2	562.5	-4	158.5	1.6	46.7	-36	19.7
nes International (9)		4.6	8	4238.9	1	4076.0	1	225.4	1	208.7	2.0	1.4	-57	332.0
-U. S. Steel Group	X	22.0	5	989.5	5	815.6	6	4864.0	-20	218.8	0.5	-756.0	NM	NEG
on Steel	WS	5.3	-33	760.1	6	1051.9	5	1036.3	-13	148.5	0.5	78.7	NM	NEG
OTHER METALS														
UP COMPOSITE		42.1	3	1264.0		1393.1		4269.8	-9	128.1	1.0	356.1	-56	11.8
h Wellman	BW	7.6	15	3924.3	1	3001.4	1	267.5	-10	137.7	2.9	-36.2	NM	NEG
a Mining	HL	1.5	NM	1688.3	5	1471.2	5	117.6	-26	129.1	1.3	-18.5	NM	NEG
met	INMT	1.6	23	457.7	9	362.4	9	319.8	-17	91.5	0.5	11.9	NM	13.5
d Resources	NRD	1.1	2	483.0	8	421.2	8	107.1	8	49.3	1.0	-4.3	NM	NEG
ps Dodge	PD	17.0*	-2	1220.3	6	1154.0	6	2434.3	-8	174.7	0.7	404.3	-40	4.2
ision Castparts (3)	PCP	5.4	6	735.8	7	678.3	7	538.3	18	73.3	1.0	49.7	40	10.9
Titanium	RTI	3.5	-8	2253.9	3	2073.1	3	165.6	-35	106.4	2.1	-57.0	NM	NEG
erior Teletec (3)	STT	2.1	65	2794.7	2	2524.1	2	149.7	8	199.6	1.4	6.6	23	31.6
ont	TRE	2.3	-21	1885.2	4	1971.0	4	170.1	-31	139.4	1.4	-0.5	NM	NEG
OFFICE EQUIPMENT & SERVICES														
ISTRY COMPOSITE		16188.4	6	13012.2		13357.0		196180.4	1	156.9	8.3	4516.6	-74	358.4
BUSINESS MACHINES & SERVICES														
UP COMPOSITE		279.2	9	3143.7		5789.6		10112.5	2	123.9	2.8	856.7	31	32.6
icomp (9)	AAC	4.6	-16	1000.9	15	962.1	15	635.4	-3	138.1	0.7	33.5	92	13.7
& Howell		17.8	19	NA	20	NA	20	625.0	2	NA	2.9	2.8	NM	645.2
yenne Software (6)	CYE	1.3*	30	5027.6	6	4590.4	6	177.6	6	699.3	0.7	3.4	NM	37.8
old	DBD	19.3	41	4989.6	7	3211.3	8	506.2	6	131.2	3.8	51.5	29	37.4
troCom Automation	ECA	4.1	28	2877.2	11	2877.2	10	306.5	97	215.1	1.3	36.3	42	11.3
rklin Electronic Publishers (3)	FPUB	3.5	-18	21060.2	2	18414.5	2	54.4	-22	328.0	6.4	-5.8	NM	NEG
eral Binding	GBND	2.7	16	752.3	16	675.2	16	311.2	2	88.0	0.9	20.3	-5	13.1
idco Systems (3)	GRCO	6.1*	-24	60520.0	1	33681.9	1	79.4	-11	793.7	7.6	10.1	NM	NEG
N Industries	HONI	3.4**	1	599.9	17	628.2	17	607.7	-8	108.5	0.6	52.7	-24	6.4
st Mfg. (11)	HUN	1.2	-12	590.1	18	568.2	18	228.6	4	117.0	0.5	17.1	-9	6.7
erMaster Technologies (6)	LMTS	2.9	67	7626.3	4	5643.0	5	55.8	75	146.9	5.2	-2.9	NM	NEG
ler (Herman) (5)	MLHR	21.3	12	3547.6	9	3251.6	7	878.7	2	146.4	2.4	33.2	-56	64.2
t Technology	PTC	5.7	-3	6480.5	5	6161.4	4	78.9	-11	90.3	7.2	2.4	NM	232.2
ey Bowes	PBI	114.0	4	3873.9	8	3045.4	9	3332.5	4	113.3	3.4	461.6	41	24.7

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990		PER EMPLOYEE				CHANGE FROM 1990		R&D AS % OF SALES	PER EMPLOYEE \$ THOUS.	CHANGE FROM 1990		P
		1991 \$ MIL.	1990 %	1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK	1991 \$ MIL.	1990 %			1991 \$ MIL.	1990 %	
Reynolds & Reynolds (9)	REY	12.5	26	2590.1	13	2210.2	12	599.3	1	124.2	2.1	38.6	-8	
Smith Corona (6)	SCO	9.1	-3	2765.5	12	2143.5	13	383.4	-19	116.2	2.4	27.1	-41	
Standard Register	SREG	7.9**	-19	1342.1	14	1407.5	14	693.7	-3	118.5	1.1	51.0	55	
Telxon (3)	TLXN	11.6**	12	9111.0	3	8580.2	3	184.6	29	145.3	6.3	19.9	NM	
TransTechnology (3)	TT	5.1	-14	3125.0	10	2774.1	11	185.7	-6	113.8	2.7	-2.8	NM	
VeriFone	VFIC	25.5	48	NA	19	NA	19	187.9	21	NA	13.6	27.1	48	
(B) COMPUTER COMMUNICATIONS														
GROUP COMPOSITE		368.8	20	22738.2		20677.9		3069.0	15	189.2	12.0	109.2	-66	33
Cabletron Systems (2)	CS	13.3	73	9717.7	16	7597.2	17	180.5	72	131.7	7.4	57.3	73	2
Chipcom	CHPM	8.4	60	30334.5	5	28113.1	4	48.0	69	172.5	17.6	6.3	264	13
Cirrus Logic (3)	CRUS	22.7	78	47395.4	2	43223.8	1	141.8	67	296.7	16.0	29.1	61	7
Cisco Systems (7)	CSCO	12.7	106	25122.8	8	24703.1	6	183.2	163	362.7	6.9	70.8	201	
Data Switch	DASW	10.6	-4	16485.3	14	13815.9	14	103.0	-15	159.7	10.3	-31.9	NM	
Digital Communications Associates (6)	DCA	21.7	-15	20687.7	12	19616.9	10	191.9	-6	183.3	11.3	16.8	-63	12
Dynatech (3)	DYTC	51.7	22	16427.0	15	12844.5	15	481.5	11	152.9	10.7	27.6	4	18
Emulex (6)	EMIX	18.2**	22	20920.8	11	17050.7	12	152.9	27	175.5	11.9	9.2	NM	19
MIPS Computer Systems	MIPS	37.2	27	53377.9	1	41191.5	2	168.5	11	242.1	22.0	-32.1	NM	
Network Equipment Technologies (3)	NWK	26.8	26	27843.2	6	16317.8	13	135.0	-25	140.2	19.9	-58.8	NM	
Network Systems	NSCO	24.8	30	17851.3	13	17107.9	11	198.7	21	142.8	12.5	23.4	-31	10
Proteon	PTON	10.1	33	21853.4	9	20317.1	9	94.7	28	204.1	10.7	9.1	52	11
Qume (2)	QUME	8.6	5	9067.2	17	11330.1	16	217.5	-2	228.2	4.0	-18.6	NM	
Retix	RETX	9.2**	-10	21770.7	10	21770.7	7	60.5	15	142.9	15.2	6.5	675	14
SynOptics Communications	SNPX	32.4	54	33812.3	4	24819.6	5	248.3	41	258.9	13.1	42.9	-7	7
Telematics International	TMAX	14.8	-26	41410.6	3	35804.3	3	64.4	-3	179.9	23.0	-3.4	NM	
3Com (5)	COMS	45.4	4	27232.6	7	20763.0	8	398.6	-5	238.9	11.4	-44.6	NM	
(C) COMPUTERS														
GROUP COMPOSITE		11753.1	3	14993.1		15434.2		133448.8	-2	169.4	8.8	554.8	-96	218
Advanced Logic Research (9)	AALR	4.3**	34	6181.7	30	6603.6	31	228.0	33	326.1	1.9	25.2	23	1
Alpha Microsystems (2)	ALMI	5.9	7	17797.0	17	14303.3	17	52.8	-6	160.0	11.1	-7.4	NM	
Amdahl	AMH	312.5**	1	33249.0	2	30447.2	2	1702.5	-21	181.1	18.4	7.0	-98	444
Apple Computer (9)	AAPL	583.0	22	40399.5	1	30794.9	1	6308.8	14	437.1	9.2	499.7	-36	116
AST Research (6)	ASTA	26.6**	45	9002.4	26	7918.5	29	688.5	29	232.6	3.9	98.4	91	2
Atari	ATC	15.3	-33	30242.6	5	16429.0	14	258.0	-37	508.9	5.9	23.6	NM	65
Commodore International (6)	CBU	31.4	13	NA	34	NA	34	1047.2	18	NA	3.0	52.6	NM	59
Compaq Computer	CPQ	197.3	6	19727.7	15	14517.8	15	3271.4	-9	327.1	6.0	173.8	-74	113
Concurrent Computer (6)	CCUR	38.1	-12	19032.0	16	14373.9	16	254.9	-25	127.5	14.9	-64.0	NM	NE
Control Data	CDA	96.4	-27	7415.4	28	9888.3	24	1524.9	-10	117.3	6.3	1.9	-88	5073
Convex Computer	CNX	29.8	10	25122.4	11	21350.4	9	198.1	-5	167.2	15.0	-9.1	NM	NE
Cray Research	CYR	141.3**	10	26187.0	9	26164.4	4	862.5	7	159.9	16.4	166.6	-1	84
Data General (9)	DGN	102.0	-28	11998.4	24	11725.6	21	1228.9	1	144.6	8.3	91.5	NM	111
Datapoint (7)	DPT	8.3	-43	4792.6	31	6754.2	30	265.5	-1	152.5	3.1	8.9	NM	93
Dell Computer (1)	DELL	24.8	38	8366.3	27	8022.0	28	889.9	63	299.6	2.8	73.4	69	33
Digital Equipment (6)	DEC	1649.4**	2	13631.2	22	11734.4	20	13911.0	7	115.0	11.9	-519.7	NM	NE
Encore Computer	ENCC	33.4	-3	26645.1	8	19525.5	12	153.3	-29	122.3	21.8	-64.8	NM	NE
Everex Systems (7)	EVXR	34.2	23	14988.6	19	10795.5	23	425.1	-3	186.0	8.1	-57.9	NM	NE
Hewlett-Packard (10)	HWP	1463.0	7	16438.2	18	13470.2	18	14494.0	10	162.9	10.1	1127.0	7	129
Intergraph	INGR	134.4	22	13046.8	23	11718.6	22	1195.4	14	116.1	11.2	111.9	14	120
International Business Machines	IBM	5001.0	2	14514.5	20	12583.1	19	64792.0	-6	188.0	7.7	121.0	-99	4133
Pyramid Technology (9)	PYRD	24.3	20	20349.5	14	21129.0	10	227.4	27	190.7	10.7	17.7	-27	137
Sequent Computer Systems	SQNT	31.6	9	23173.0	13	18220.8	13	213.3	-14	156.4	14.8	-52.4	NM	NE
Sequoia Systems (6)	SEQS	9.7	50	28168.1	7	27403.7	3	63.2	30	183.0	15.4	9.1	69	107
Silicon Graphics (6)	SGI	65.3	43	25415.1	10	23049.7	5	549.9	31	214.2	11.9	47.7	-1	136
Stratus Computer	SRA	80.7	34	32366.0	3	22767.6	7	448.6	11	180.0	18.0	65.4	27	123
Sun Microsystems (6)	SUNW	356.6	18	28569.9	6	22829.0	6	3221.3	31	258.1	11.1	284.0	84	125
Tandem Computers (9)	TDM	266.6	5	23876.3	12	20699.6	11	1922.2	3	172.1	13.9	57.2	-69	466
Tandon	TCOR	12.0	7	7271.1	29	8111.4	27	461.4	5	278.6	2.6	-48.5	NM	NE

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	1991 \$ MIL.	CHANGE FROM 1990 %	R&D AS % OF PROFITS
				1991 \$	1991 RANK	AVG 1987-91 \$	AVG 1987-91 RANK							
adadata (6)	TDAT	45.2	41	30247.2	4	21824.8	8	257.8	15	172.7	17.5	1.3	-96	3595.5
sys	UIS	638.9	-14	10595.4	25	8825.1	26	8687.2	-14	144.1	7.4	-1288.3	NM	NEG
ng Laboratories (6)	WAN.B	233.6	-1	13911.4	21	9760.5	25	2091.5	-15	124.6	11.2	-362.8	NM	NEG
ith Electronics	ZE	54.1**	-3	1953.1	33	2275.7	32	1321.6	-6	47.7	4.1	-51.4	NM	NEG
OS International	ZEOS	2.0	539	2697.6	32	1314.5	33	230.9	82	310.4	0.9	16.2	146	12.4
DATA PROCESSING														
GROUP COMPOSITE		186.7	8	5347.8		4802.2		3418.2	6	97.9	5.5	381.0	9	49.0
om (3)	ACXM	5.5	20	3553.9	9	2873.3	9	97.7	9	63.5	5.6	6.1	-29	90.1
erican Management Systems	AMSY	16.6	35	5190.3	5	4633.2	6	285.2	9	89.1	5.8	21.0	9	79.1
omatic Data Processing (6)	AUD	97.6	8	5134.7	6	3861.7	7	1771.8	3	93.3	5.5	299.6	5	32.6
mputer Language Research	CLRI	6.6	-13	5457.9	4	5257.3	3	115.7	-3	95.7	5.7	6.4	NM	103.4
Care Systems	CYS	6.3	-41	5569.4	3	5153.0	4	74.5	-4	65.8	8.5	1.4	NM	466.6
ech (2)		12.8	45	6748.1	2	5809.3	2	272.3	42	144.1	4.7	5.7	NM	225.1
tional Data (5)	NDTA	7.0	-3	3160.5	10	2267.2	10	229.6	-17	104.4	3.0	-23.9	NM	NEG
rling Software (9)	SSW	10.1	13	5034.5	7	5034.5	5	224.4	12	112.2	4.5	21.2	20	47.4
ngard Data Systems	SNDT	20.4	-1	12044.4	1	8994.0	1	283.6	8	167.8	7.2	38.3	5	53.1
tems & Computer Technology (9)	SCTC	4.0	58	3828.6	8	3608.3	8	63.4	34	60.4	6.3	5.2	378	77.9
DISK & TAPE DRIVES														
GROUP COMPOSITE		708.7	28	6840.1		9397.2		11169.3	17	107.8	6.3	306.4	-54	231.3
plied Magnetics (9)	APM	37.3**	20	3728.1	17	3039.7	17	455.5	24	45.5	8.2	-17.6	NM	NEG
hive (9)	ACHV	26.5*	19	10665.3	9	7173.8	12	345.6	18	138.9	7.7	-49.6	NM	NEG
IS Enhancements (6)	CME	2.6	35	4668.5	16	3733.4	16	130.1	-31	236.9	2.0	-12.0	NM	NEG
inner Peripherals	CNR	85.0	35	10261.6	10	6004.7	14	1599.0	20	193.0	5.3	128.4	-28	66.2
abyte	EXBT	21.1**	49	24060.4	2	21880.6	2	234.1	37	266.9	9.0	50.2	17	42.0
hchinson Technologies (9)	HTCH	4.2	6	1503.9	19	1279.9	19	143.3	17	51.2	2.9	6.0	-18	70.1
mega	IOMG	17.9	38	15558.5	6	11224.8	7	136.6	13	118.4	13.1	17.6	13	102.2
.Systems	IPLSA	1.3**	32	9751.9	11	13513.1	5	60.5	111	454.7	2.1	12.5	99	10.4
mag	KMAG	18.0**	43	6836.6	14	4732.6	15	279.2	55	105.9	6.5	30.7	63	58.8
asstor Systems	MSCO	3.6	-9	18899.5	3	14195.1	4	46.3	4	244.8	7.7	2.8	NM	128.4
axtor (3)	MXTR	54.3	53	6535.0	15	6730.6	13	871.3	77	104.9	6.2	-54.9	NM	NEG
ropolis	MLIS	24.1	18	8656.5	13	8194.4	11	350.9	-8	126.2	6.9	4.5	-48	535.6
antum (3)	QNTM	43.3	68	29931.5	1	27125.7	1	877.7	97	607.4	4.9	116.0	61	37.3
xon (9)	REXN	13.3	41	16429.4	4	10935.4	8	183.0	16	226.5	7.3	13.6	44	97.8
agate Technology (6)	SGAT	137.5**	32	3197.1	18	2293.0	18	2677.0	11	62.3	5.1	81.6	-46	168.6
orage Technology	STK	118.8	21	11764.2	8	9301.1	10	1584.9	3	156.9	7.5	105.8	3	112.3
Quest Technology (9)	SYQT	12.2	85	15612.8	5	15612.8	3	115.1	43	147.6	10.6	7.1	-9	172.2
stem Industries (7)	SYI	4.8	-7	9041.5	12	9920.8	9	93.3	-4	176.1	5.1	-3.7	NM	NEG
estern Digital (6)	WDC	83.0	1	12311.6	7	11621.2	6	986.2	-8	146.3	8.4	-132.5	NM	NEG
PERIPHERALS & OTHER														
GROUP COMPOSITE		1044.9	6	7648.9		9355.6		20436.0	1	149.6	5.1	1126.4	-6	92.8
M International (7)	AM	8.8	-39	1470.2	21	1794.1	21	857.9	-2	144.0	1.0	11.4	NM	76.8
ancTec (3)	BTEC	9.0**	-20	5264.9	16	6001.5	15	183.8	-1	107.2	4.9	14.6	20	61.7
erry (2)	CHER	8.8	13	2932.2	20	2403.1	20	245.9	18	81.7	3.6	-2.7	NM	NEG
AC	EMC	18.4	24	15963.6	8	12729.8	7	232.4	36	201.2	7.9	20.1	62	91.5
enicom	GECM	2.3	-34	915.6	22	1688.8	22	217.0	-15	86.4	1.1	-16.5	NM	NEG
Focus Systems	INFS	2.8	93	18205.1	7	15836.5	5	49.5	35	317.5	5.7	6.6	-22	43.3
telligent System	INS	5.0	38	27712.7	3	15751.2	6	48.7	-6	269.0	10.3	-1.7	NM	NEG
ey Tronic (6)	KTCC	8.7**	17	3893.8	19	3430.7	18	141.0	1	62.9	6.2	-7.4	NM	NEG
illtope Group	MILT	5.3**	-3	8830.0	12	7477.9	13	103.1	-7	171.8	5.1	5.1	44	104.6
ylex	MYLX	2.7	100	20423.1	5	10728.5	9	54.3	13	417.4	4.9	-3.3	NM	NEG
ational Computer Systems (1)	NLCS	11.3	39	4248.7	18	3049.2	19	302.5	-4	114.2	3.7	24.2	15	46.6
orth Atlantic Industries	NATL	3.4	105	8669.2	13	6842.2	14	59.4	41	152.3	5.7	5.6	54	60.5
rintronix (3)	PTNX	13.1**	6	11401.7	11	8547.3	11	106.9	-14	93.0	12.3	-2.0	NM	NEG
MS (9)	AQM	9.1	7	5893.4	15	5224.1	16	304.3	10	197.8	3.0	27.0	24	33.6
adius (9)	RBUS	8.8	30	25305.5	4	23378.1	2	118.6	7	341.9	7.4	6.2	-41	142.7
asterOps (6)	ROPS	3.1	42	18630.9	6	17215.5	4	72.4	56	431.0	4.3	10.2	165	30.8
andard Microsystems (2)	SMSC	12.3	16	28775.7	2	24495.3	1	87.0	13	203.3	14.2	2.1	-72	587.3
ummagraphics (5)	SUGR	6.2	84	13519.6	9	12015.1	8	80.6	75	175.3	7.7	6.7	16	92.7
ymbol Technologies	SBL	10.0	15	4529.5	17	5196.5	17	319.4	38	145.2	3.1	36.7	186	27.1

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		1991 \$ MIL.	CHANGE FROM 1990 %	PER EMPLOYEE				1991 \$ MIL.	CHANGE FROM 1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	1991 \$ MIL.	CHANGE FROM 1990 %	R&D AS % OF PROFITS
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
Tseng Labs	TSNG	0.6	44	11942.3	10	10047.5	10	61.0	59	1173.0	1.0	15.6	63	4.0
Xerox	XXR	890.0	5	8135.3	14	7481.7	12	16745.0	-1	153.1	5.3	963.0	-13	92.4
Zitel (9)	ZITL	5.2	54	31072.3	1	21505.9	3	45.5	31	273.8	11.3	5.0	17	102.6
(G) SOFTWARE & SERVICES														
GROUP COMPOSITE		1547.6	18	23102.2		20120.5		11490.9	17	171.5	13.5	1271.0	1	121.8
Adobe Systems (11)	ADBE	33.2*	65	47393.7	2	34275.5	4	229.7	36	327.6	14.5	83.6	26	39.7
Aldus	ALDC	23.4	52	24594.5	19	18319.6	25	167.5	24	176.0	14.0	34.7	-2	67.5
American Software (4)	AMSWA	3.9	50	4791.0	38	5439.8	37	101.9	10	126.7	3.8	26.7	-11	14.4
Autodesk (1)	ACAD	24.4	14	22127.0	26	18651.5	24	237.9	33	215.8	10.3	92.0	20	26.5
BMC Software (3)	BMCS	22.2	46	37430.0	6	34757.1	3	130.1	49	219.4	17.1	38.2	53	58.1
Boole & Babbage (9)	BOOL	9.6	30	14911.4	32	14551.3	31	98.6	9	153.3	9.7	-10.6	NM	NEG
Borland International (3)	BORL	23.3	63	23637.9	23	22802.9	20	226.8	100	230.0	10.3	41.9	185	55.6
Broderbund Software (8)	BROD	7.1	15	26055.3	16	26055.3	14	55.8	11	205.8	12.7	11.6	14	60.8
Cadence Design Systems	CDN	80.2	23	30976.0	8	29413.6	8	392.3	1	151.6	20.4	-11.8	NM	NEG
Computer Associates International (3)	CA	177.4	4	26479.4	15	21128.3	22	1348.2	4	201.2	13.2	261.2	11	67.9
Comshare (6)	CSRE	13.6	20	12048.0	35	8385.3	36	123.2	19	109.5	11.0	10.1	-6	134.8
Continuum (3)	CNU	42.0*	72	36544.3	7	30181.2	7	112.7	41	98.0	37.3	15.4	82	272.2
DR Holdings		159.7**	-16	23661.8	22	22705.1	21	1382.4	-13	204.8	11.6	-521.1	NM	NEG
Electronic Arts (3)	ERTS	8.3	17	27700.0	13	26968.5	10	101.8	40	339.2	8.2	13.8	44	60.1
Evans & Sutherland Computer	ESCC	32.1	16	24667.7	18	24960.1	16	144.9	-8	111.5	22.1	15.2	-42	210.4
Goal Systems International (1)	GOAL	21.0	11	23909.1	21	22891.2	19	127.8	18	145.2	16.5	12.6	69	167.5
Hathaway (6)	HATH	6.5**	-14	10729.7	36	12917.2	33	51.6	1	85.5	12.5	2.1	NM	308.7
Hogan Systems (3)	HOGN	9.3	-18	25891.7	17	26855.4	11	50.3	16	139.6	18.5	5.5	29	170.0
Informix	IFMX	23.9	20	21286.4	27	12736.0	34	179.8	23	160.4	13.3	13.9	NM	172.2
Interleaf (3)	LEAF	17.4**	11	22596.6	25	17189.5	28	84.3	-5	109.4	20.7	-1.0	NM	NEG
Intermetrics (2)	IMET	1.0*	-22	1688.5	39	1838.0	38	55.6	20	91.2	1.9	3.2	52	32.3
Keane	KEA	1.1	59	814.6	41	854.0	40	95.6	3	68.9	1.2	9.5	8	11.8
KnowledgeWare (6)	KNOW	14.0	77	16643.3	29	17331.5	27	124.3	88	147.8	11.3	24.3	71	57.5
Logicon (3)	LGN	2.6	12	829.3	40	772.6	41	259.0	1	82.0	1.0	14.1	-2	18.5
Lotus Development	LOTS	130.5	18	30345.6	9	31384.4	6	828.9	20	192.8	15.7	67.7	28	192.8
MacNeal-Schwendler (1)	MNS	13.6	37	42507.8	4	31676.8	5	56.6	26	177.5	24.0	17.0	14	79.8
Marcam (9)	MCAM	8.7*	32	18410.6	28	19539.9	23	56.5	34	120.2	15.3	7.7	18	111.8
Microsoft (6)	MSFT	235.4	30	28614.9	12	26783.8	12	1843.4	56	224.1	12.8	670.6	63	35.1
Novell (10)	NOVL	82.2	22	28930.0	11	26246.8	13	640.1	29	225.1	12.9	248.1	71	33.2
On-Line Software International (5)	OSI	27.0	18	38152.5	5	23935.3	17	101.3	13	143.1	26.7	7.6	29	355.0
Oracle Systems (5)	ORCL	99.0	3	13258.5	34	12261.6	35	1027.9	12	137.7	9.6	-13.2	NM	NEG
Phoenix Technologies (9)	PTEC	13.9**	52	44964.4	3	41114.6	2	52.1	46	168.7	26.7	1.1	NM	1229.6
Progress Software (11)	PRGS	7.0	45	15420.4	31	15420.4	30	58.3	45	129.0	12.0	9.5	61	73.3
Ross Systems (6)	ROSS	6.5	-23	14205.7	33	17148.1	29	49.7	53	108.7	13.1	3.7	NM	173.5
Softech (5)	SOFT	3.1	144	5315.3	37	1705.0	39	54.2	22	94.5	5.6	-6.3	NM	NEG
Software Publishing (9)	SPCO	56.6	120	78108.9	1	45453.7	1	143.1	2	197.4	39.6	-14.9	NM	NEG
Structural Dynamics Research	SDRC	24.9	31	23506.1	24	17965.0	26	146.3	23	138.2	17.0	27.8	34	89.5
Sybase	SYBS	29.2**	54	27336.1	14	27336.1	9	159.4	55	149.3	18.3	12.5	NM	234.0
Symantec (3)	SYMC	17.7	72	29518.3	10	25496.0	15	116.3	56	193.9	15.2	14.3	30	123.5
System Software Associates (10)	SSAX	12.4	28	15900.1	30	14056.6	32	149.1	20	190.9	8.3	25.9	1	48.0
Systems Center	SMX	22.9	-13	24347.2	20	23779.6	18	125.8	19	134.0	18.2	6.6	NM	346.7
(H) SYSTEM DESIGN														
GROUP COMPOSITE		299.4	11	12924.4		10675.6		3035.7	2	131.1	9.9	-88.8	NM	NEG
ASK Computer Systems (6)	ASKI	32.9	80	15336.6	3	17013.8	3	343.9	66	160.6	9.6	8.7	-9	378.2
Auto-trol Technology (9)	ATTC	9.8	14	14850.0	4	12195.7	5	64.4	-19	97.6	15.2	-8.0	NM	NEG
Bolt Beranek & Newman (6)	BBN	32.5	3	14229.9	6	9345.7	7	270.6	3	118.5	12.0	9.2	NM	353.2
Cerner	CERN	5.9	23	11649.5	8	9419.0	6	77.2	35	153.0	7.6	7.6	80	77.9
FileNet	FILE	12.6	4	14789.2	5	15642.5	4	122.5	19	143.4	10.3	12.5	143	101.0
General Automation (9)	GA	3.1	37	8186.8	12	7549.6	11	48.6	24	128.0	6.4	1.0	NM	309.2
HBO	HBOC	21.9	3	13637.6	7	8388.3	10	170.7	-2	106.5	12.8	-4.3	NM	NEG
Landmark Graphics (6)	LMRK	11.2	12	22408.8	2	24864.2	2	89.9	31	180.1	12.4	14.4	32	77.5
MAI Systems (9)	MCO	18.2	-5	6884.2	15	4651.1	15	336.3	-14	127.3	5.4	-65.4	NM	NEG
Mentor Graphics	MENT	83.5	6	34249.4	1	25573.3	1	400.1	-8	164.1	20.9	-63.0	NM	NEG
Recognition Equipment (10)	REC	11.4	7	8309.9	10	5027.2	14	155.2	-33	113.4	7.3	7.0	NM	162.2
Shared Medical Systems	SMED	33.6	5	8218.7	11	8836.9	9	437.7	9	106.9	7.7	39.5	17	85.1

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE				CHANGE FROM 1990 \$ MIL.	1990 %	PER EMPLOYEE \$ THOUS.	R&D AS % OF SALES	1991 \$ MIL.	CHANGE FROM 1990 %	R&D AS % OF PROFITS
				1991 \$	1991 RANK	AVG. 1987-91 \$	AVG. 1987-91 RANK							
3M	TTN	3.9	78	2900.0	16	2168.8	16	146.5	18	108.5	2.7	3.5	25	110.8
Advanced Systems (9)	TRSC	10.2	0	7503.0	14	6737.1	13	137.5	-5	101.4	7.4	2.7	-53	375.7
Amate (4)	ULT	4.9	-15	9943.3	9	9082.8	8	185.6	-12	375.7	2.6	-55.5	NM	NEG
At Systems (3)	WCAT	3.9	38	7792.3	13	6878.5	12	49.0	5	98.7	7.9	1.2	-47	309.4

PAPER & FOREST PRODUCTS

INDUSTRY COMPOSITE		536.2	5	1789.8		1704.0		52458.8	-4	175.1	1.0	1847.7	-49	29.0
Alger Paper Mills	BPMI	0.7	2	1539.3	6	1474.6	6	69.1	-9	150.8	1.0	6.3	13	11.3
Case Cascade	BCC	11.0	-4	559.8	11	504.6	11	3950.5	-6	201.4	0.3	-128.1	NM	NEG
Consolidated Papers	CPER	7.0	21	1460.8	7	1154.7	7	871.9	-8	181.9	0.8	145.7	-36	4.8
International Paper	IP	82.7	-4	1173.0	10	1148.6	10	12703.0	-2	180.2	0.7	638.0	-33	13.0
Jones River Corp. of Virginia	JR	45.9	51	1176.9	9	1176.9	9	4561.7	-16	117.0	1.0	132.8	NA	34.6
Kimberly-Clark	KMB	148.8	10	3604.1	1	3161.4	1	6776.9	6	164.1	2.2	757.1	5	19.7
Mead	MEA	38.5	15	1782.4	5	1963.5	5	4579.3	-4	212.0	0.8	129.9	-18	29.6
Weyerhaeuser	SPP	64.4	-3	2213.1	3	2227.5	3	4976.5	-7	171.0	1.3	-81.7	NM	NEG
Union Camp	UCC	50.5	-3	2512.2	2	2417.2	2	2967.1	4	147.6	1.7	199.8	-45	25.3
Westvaco (10)	W	30.4	-3	2107.2	4	2021.4	4	2301.2	-5	159.4	1.3	225.9	-31	13.5
Weyerhaeuser	WY	56.3	-2	1454.8	8	1338.9	8	8701.6	-4	225.0	0.6	-177.8	NM	NEG

SERVICE INDUSTRIES

INDUSTRY COMPOSITE		144.3	7	630.3		1453.0		16113.5	8	70.6	0.9	552.6	42	26.1
Arg-Warner		28.6	3	334.9	21	442.5	19	2375.7	2	27.8	1.2	1.2	-97	2383.3
Boyle Mfg.	BTLR	2.3	10	756.6	12	624.3	15	460.8	-18	151.6	0.5	-13.7	NM	NEG
Carbon	CCC	5.9	5	3900.9	3	3687.2	2	308.4	8	203.8	1.9	60.7	-4	9.7
CG	EGG	24.7	7	693.8	15	735.9	12	2688.5	9	75.5	0.9	120.4	12	20.5
CompuLink Radio & Electronics	EE	0.7**	NA	3600.0	4	2839.6	4	68.0	-8	340.1	1.1	1.6	-60	45.1
Eastman Wheel	FWC	7.5	9	803.4	11	679.1	13	1992.0	20	213.4	0.4	63.8	27	11.8
Genex (9)	GEOX	1.0	50	661.6	17	589.3	17	67.8	53	46.5	1.4	3.1	35	30.9
Global Associates	GILBA	2.1	55	604.8	18	489.0	18	271.3	6	79.8	0.8	5.3	-71	38.4
Harshbarger Resource Development	HHRD	2.2	66	3232.4	6	2537.1	5	71.1	30	104.6	3.1	9.9	-68	22.2
Information Resources	IRIC	5.5	72	1492.3	9	1110.8	10	207.7	25	56.5	2.6	22.2	95	24.8
Interform Mid-America (9)	INSMA	0.9	1389	3496.2	5	1255.4	8	49.5	37	187.7	1.9	7.9	48	11.6
Marietta (9)	MRTA	0.9	-46	NA	22	NA	22	58.1	-5	NA	1.6	-2.5	NM	NEG
McDermott International (3)	MDR	23.1**	19	679.4	16	973.7	11	3136.0	19	92.2	0.7	-69.8	NM	NEG
MLX	MLXX	3.3**	10	6894.8	1	2387.5	6	50.7	-8	104.6	6.6	0.3	-69	1266.7
National Patent Development	NPD	4.7	-41	1809.7	7	2854.1	3	258.9	-12	100.8	1.8	-0.9	NM	NEG
Pratt Industrial (5)	PRE	3.4	10	723.4	13	669.2	14	637.1	2	135.6	0.5	117.2	-2	2.9
Science Applications (1)		8.3	24	695.7	14	614.8	16	1161.8	14	97.6	0.7	54.0	12	15.3
Talley Industries	TAL	4.2	6	1356.1	10	1170.2	9	332.6	0	106.8	1.3	-43.1	NM	NEG
UTLX (3)	UTLX	2.5**	7	5794.5	2	5535.5	1	47.3	15	108.1	5.4	8.1	72	31.4
Virlen (1)	VRIN	2.8	1	1494.7	8	1564.5	7	230.5	-5	122.6	1.2	7.7	-27	36.5
Volt Information Sciences (10)	VOLT	5.8	-27	379.9	20	389.1	20	466.1	-7	30.7	1.2	-1.1	NM	NEG
Wheelabrator Technologies	WTI	3.9	8	452.4	19	361.8	21	1173.4	2	136.4	0.3	200.5	166	1.9

TELECOMMUNICATIONS

INDUSTRY COMPOSITE		3786.8	6	5507.2		10097.7		95800.5	1	139.3	4.0	6316.7	-44	59.9
DC Telecommunications (10)	ADCT	32.3**	27	13309.3	11	10700.0	9	293.8	13	121.0	11.0	36.4	-5	88.8
American Telephone & Telegraph	T	3114.0	6	9820.3	15	8922.9	14	44651.0	2	140.8	7.0	883.0	-82	352.7
Associated Communications	ACCMA	0.5	-68	6011.2	18	8637.1	15	46.5	30	522.7	1.2	-4.8	NM	NEG
BellSouth	BLS	42.0	3	437.1	25	530.6	25	14445.5	1	150.3	0.3	2260.3	-6	1.9
Comdial	CMDL	3.3**	-14	3693.9	19	3060.5	22	63.1	21	69.7	5.3	-0.9	NM	NEG
Communications Satellite	CQ	17.5	10	10667.5	14	10611.1	10	522.9	14	317.8	3.4	103.1	NM	17.0
Digital Systems International	DGTL	5.2	86	13707.9	10	10108.7	13	51.8	38	136.2	10.1	13.8	-1	37.7
SC Communications	DIGI	63.8	23	19571.4	3	15594.3	6	461.5	-11	141.5	13.8	-106.8	NM	NEG
Secutone Information Systems	XTON	7.7**	12	3488.6	21	3098.7	21	266.6	-5	121.2	2.9	2.1	-54	363.4
General DataComm Industries (9)	GDC	20.0	-4	11534.3	12	10348.9	11	191.7	-5	110.4	10.5	0.9	NM	2251.1
TE	GTE	190.0	-5	1172.8	24	1626.3	23	19621.0	2	121.1	1.0	2319.0	-5	8.2
Inter-Tel	INTL	3.6	8	6437.2	16	6037.6	17	66.1	-1	117.0	5.5	1.5	-55	236.9
Optel (9)	KPTL	2.0	10	11528.4	13	5389.8	19	48.5	-5	275.6	4.2	-4.8	NM	NEG
U/A-Com (9)	MAI	16.8	30	3611.2	20	3585.8	20	382.1	2	82.2	4.4	21.0	NM	79.9
Microcom (3)	MNPI	12.4	28	29349.9	1	19955.3	2	55.4	-23	131.0	22.4	-33.2	NM	NEG

R&D SCOREBOARD

COMPANY	STOCK SYMBOL	R&D EXPENSES						SALES				PROFITS		
		CHANGE FROM 1990	1990	PER EMPLOYEE			AVG. 1987-91 RANK	CHANGE FROM 1990	PER EMPLOYEE	R&D AS % OF SALES	1991	CHANGE FROM 1990	1990	R&D AS % OF PROF
				1991	1991	1987-91								
Nynex	NYN	108.4	1	1292.0	22	1204.7	24	13249.8	-3	157.9	0.8	792.9	-40	13
Octel Communications (6)	OCTL	19.9	26	1756.3	8	1446.6	7	160.3	25	141.6	12.4	27.1	0	73
Pictoretel	PCTL	10.2	89	22614.7	2	28692.3	1	78.0	111	173.8	13.0	6.8	NM	149
Porta Systems	PSI	6.0	14	6254.7	17	6035.5	18	95.3	33	98.7	6.3	9.3	21	64
Scientific-Atlanta (6)	SFA	49.2	24	16391.7	9	10189.3	12	493.7	-20	164.6	10.0	1.5	-98	3209
Telco Systems (8)	TELC	8.5	34	19332.6	4	16101.0	5	102.7	14	232.4	8.3	13.4	61	63
Tellabs	TLAB	37.2	18	17756.0	7	12837.7	8	212.8	1	101.6	17.5	7.0	-35	529
TIE/communications	TIE	1.4	-67	1185.4	23	6583.8	16	108.3	-1	91.7	1.3	-40.0	NM	NEC
U. S. Robotics (9)	USRX	7.2	53	17808.5	6	16295.0	4	77.0	37	191.5	9.3	12.1	55	59
VMX (6)	VMXI	7.5	4	18762.5	5	18874.7	3	55.3	-3	138.2	13.6	-4.1	NM	NEC

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A A. Laboratories 10A Abbott Laboratories 10B Acme Electric 7A Acme 13B Acme 15D Acme 10B Adapter 7D Acme 18 Acme 11 Acme 15G Acme 10B Acme 7D Acme 8 Air Products & Chemicals 3 Acme 13D Aides 15G Acme 14B Allen Group 7C Allergon 10A Acme 13A Acme 10B Allied Research 13A Alliea Group 4 Apollo Industries 7D Acme 15C Allen 7D Acme 14A Acme 15F Acme 15C Acme 5B American Cyanamid 3 Acme 13A American Home Products 10A Acme 8 Acme 15D American Power Conversion 7A Acme 15G Acme 11 American 7C Acme 10A American 9A Acme 7D American 7D AMT 10B Acme 15A Analog Device 7D Analog 7C Acme 12 Acme 15C Acme 7C Acme 15E Acme 13C	Acme 13C Acme 18 Archive 15E Arco Chemical 3 Acme 12 Artech 7B Acme 14B Armstrong World Industries 5A Ash and O. 9A ASK Computer Systems 15H ASI Holding 11 Acme 18 AST Research 15C Astec Industries 13C Acme 18 Acme 15C Acme 9A Atme 7D Acme 7D Acme 15G Acme 7C Acme 15D Autotrol Technology 15H Acme 13A Avon Products 5C Aydin 7B	Acme 10B BJ Services 9B Acme 13B Blessings 13A Block Drive 5C Bount 13A BMC Software 15G Acme 1 Boji Beranek & Newman 15H Boote & Babbage 15G Boate 8 BorgWarner 17 Acme 15G Brady (W. H.) 13A Acme 13C Bristol-Myers Squibb 10A Acme 15G Brooke Group 5B Brooktree 7D Brown & Sharpe Mfg 13B Acme 12 Brush Wellman 14C Burlington Industries 13D Buter Mfg 17 BWIP Holding 13C	Caberton Systems 15B Cabot 3 Acme 15G Cagan Carbon 17 California Microwave 7B Camplex 3 Cambell Soup 8 Carlsle 13A Carpenter Technology 14B Carter Wallace 10A Caterpillar 13C Acme 9B Acme 10A Acme 13A Acme 15H Champion Parts 2B Crane Power Systems 7A Crater 5C Checkpoint Systems 7B Acme 13D Cherry 15F Chevron 9A Acme 15A Acme 15B Chips & Technologies 7D Chiron 10A Chrysler 2A Acme 5C Acme 7B	Cirrus Logic 15B Cisco Systems 15B Clarco 6 Acme 13B Clax 5C CM 13C CMS Enhancements 15E Acme 12 Coherent 7C Acme 12 Coleman 7A Acme 5C Collagen 10B Coltec Holdings 1 Coltec Industries 4 Acme 18 Commodore International 15C Communications Satellite 18 Compaq Computer 15C Compression Labs 7B Computer Associates Intl 15G Computer Language Rsch 15D Computer Products 7A Comshare 15G Concord Camera 12 Concord Fabrics 13D Concurrent Computer 15C Acme 15E Acme 16 Acme 15G Control Data 15C Convex Computer 15C Cooper Tire & Rubber 2C Coors (Adolph) 5B Coors 10B Corning 13A Acme 13A CPC International 8 Crane 13A Cray Research 15C Crampton & Knowles 3 Crown Cork & Seal 6 Acme 13D CTS 7D Cubic 7B Acme 2B Acme 1 CyCare Systems 15D Acme 7D	Data I/O 7C Data Switch 15B Acme 15C Acme 10B De Tomaso Industries 2A Deere 13C Dekab Genetics 8 Del Laboratories 5C Del Monte 8 Dell Computer 15C Deltex 3 Dexter 3 DH Technology 7D Diagnostic Products 10A Diagnostic/Retrieva 7B Acme 10B Dicear Electronics 7D Diebold 15A Digicon 9B Digita. Communications 15B Digita. Equipment 15C Digita. Microwave 7B Digital Systems International 18 Dionex 7C Donaldson 2B Donnelly 13A Dover 13C Dow Chemical 3 DR Holdings 15G Dresser Industries 9B Acme 18 DuPont 13C Durr 13D Acme 5A Acme 7B Acme 15B	Encore Computer 15C Englehard 3 ESCO Electronics 7C Esquire Radio & Electronics 17 Super 13A Esterline Technologies 7C Ethyl 3 Evans & Sutherland 15G Exabyte 15C Exabyte 15E Exo 7D Excel Industries 2B Executive Information Sys 18 Exide Electronics 7A Exxon 9A F&C International 3 Fab Industries 13D Fairchild 13A Fairmont Industries 8 Fair 13C Farrel 13C Federal Mogul 2B Ferro 3 Ferromex International 7B Figgie International 4 Acme 15H Acme 9A Acme 13A First Mississippi 3 Fischer Imaging 10B Fischer & Porter 7C Fisher-Price 12 Fleetwood Enterprises 12 Flexsteel Industries 5A Fuke (John) Mfg 7C FMC 13C Ford Motor 2A Forest Laboratories 10A Acme 6 Foster Wheeler 17 Frank in Electric 7A Franklin Electronic Pub 15A Fresenius USA 10B Fruenau Trailer 2B Fuller (H. B.) 3 Acme 13A	General Dynamics 1 General Electric 4 General Mills 8 Genera. Motors 2A General Signal 13C Genetics Institute 10A Genicom 15F Genlyte Group 7A GenRad 7C Acme 13C Genzyme 10A GEO International 13C Genzyme 17 Gerber Scientific 13C Giddings & Lewis 13B Gilbert Associates 17 Gillette 5C Gleason 13B GM Hughes Electronics 7B Goal Systems International 15 Goodrich (B. F.) 3 Goodyear Tire & Rubber 2C Goulds Pumps 13C Grace (W. R.) 3 Graco 13C Graco Systems 15A Great American Mgmt 13A Great Lakes Chemical 3 Green (A.P.) Industries 11 Grow Group 3 GTE 18 GTE 15D GTE 7D GTE 11 GTE 13D GTE 13A	H Hoch 7C Harsco 10B Harsco 9B Hannaford Bros 8 Harsco 12 Harman International Industries 1 Harman Industries 7B Harnischfeger Industries 13C Harsco 7B Harsco 13A Harsco 12 Harsco 15G Harsco 14B HBO 15H Harsco 10B Heca Mining 14C Hen-Weiner 13C Helene Curtis Industries 5C Harsco 13C Henley Group 7C Harsco 10B
--	--	---	--	--	--	--	---	--

The number following each company name identifies the Scoreboard category under which it is listed

BUSINESS WEEK/JUNE 29, 1992 125



EDITED BY AMY DUNKIN

Investing

PREDICTING THE MARKET'S MOOD SWINGS

When the Federal Reserve cut interest rates in December, it appeared as if nothing could hold back stocks. But subscribers to one market letter got a different message. Mark Leibovit, publisher of *Volume Reversal Survey*, advised his followers on Jan. 10 to start selling.

The reason? Leibovit's proprietary trading system—which focuses solely on trading volume—was signaling that the rally was about to peter out. With the Standard & Poor's 500-stock index down nearly 2% since then, his call was on the money.

Chalk one up for the technical analysts. A pure "technician," like Leibovit, is a numbers freak, poring over data on stock prices and volume to predict market moves on the basis of recurring pat-

terns. Such analysis is based on a belief that stocks, and the market as a whole, have an eerie quantitative life of their own, apart from mundane influences like interest rates.

Technicians admit that the method is not a perfect sci-

A guide for investors who want to spot the trends the pros follow

ence. "You're not looking at a balance sheet," notes Leibovit, who is based in Sedona, Ariz. "You're trying to quantify human emotion, and ultimately, that's a subjective call."

For that reason, many market timers take into account

less arcane measures, including company fundamentals, market valuation indexes, transactions by insiders and short sellers, and government monetary actions. These are signs that all investors can follow.

Experts don't recommend that small investors use timing systems to flip in and out of stocks. For most folks, buy and hold remains the best policy. But by learning how to take the market's temperature, more aggressive investors may be able to trim their stock positions before expected downturns and rebuild them before market rebounds.

Indeed, Robert Nurock, a Paoli (Pa.) technical analyst, believes that given current trends, investors who are heavily into stocks "should be thinking of allocating some

assets to other investments

To be sure, no one indicator can predict what the market will do. But some measures, when studied together, have proven reliable at signaling changes. Here's a look at some of the more basic indicators and how to read them:

■ **Price-earnings ratio:** This essential calculation represents the multiple of a company's trading price to its earnings and reflects the public's sentiment about the prospects for future growth.

Gauging the proper market p-e is trickiest coming out of a recession, as we are now. The current p-e ratio for the Standard & Poor's 500-stock index—25—hasn't been as high since the 1987 crash. True, in today's lower-interest-rate environment, high p-e's look less alarming. But analysts fear that investors may be depend-



higher profits than corporations will be able to deliver, the market is valued at times next year's profits will still be high by historical standards.

Price-dividend ratio: Given that profits can gyrate, many investors look instead at the relationship between stock prices and dividend yields, which often are more stable. Newsletter editor Norman Fosback says the price-dividend ratio historically has been one of the most reliable barometers of the market's trend.

With the Dow Jones industrial average yield now at 3%, investors may wish it otherwise. According to Fosback's research, whenever the average yield of Dow stocks has fallen below 3% since 1941, the market tumbled 10% within a year. But the signal "can persist for a year or more, by which time people tend to forget or ignore it," says Bernadette Murphy, technician for M. Kimelman & Co.

Initial public offerings: One of the best gauges of market sentiment is the volume of new stock issues. In the latter

stages of bull markets, investors have shown a penchant for being careless about what they'll buy—and Wall Street is only too eager to take public a lot of highly speculative companies. Fosback measures the volume of initial public offerings (IPOs), then uses the gross national product as a benchmark. What Fosback found is that when IPO dollar-volume exceeds 0.5% of gross national product, the market has probably become too frothy. At 2.11%, the current level marks one of the highest readings ever.

As a backup, Fosback also studies "secondary" offerings by public companies, such as General Motors' recent \$2.3 billion stock sale. He finds that 10 or more a week usually portends a correction. Since March, secondary offerings have been averaging 8.9 a week—the same pace as before the 1987 crash. Again, that's bad news.

Short sales: For the real story, technicians put their ear to the trading floor of the New York Stock Exchange. There, the specialists take the market's pulse every

WHAT SOME INDICATORS ARE SAYING ABOUT THE MARKET

P-E RATIO Stocks look pricey: S&P 500 is at an historically steep 25 times earnings, while NYSE stocks are high at 17.9. BEARISH	STOCK OFFERINGS With dollar volume of initial public offerings now running at 2.11% of total U.S. gross national product, current level marks one of the highest readings ever. BEARISH	SPECIALIST SHORT RATIO Stock sold short by specialists now 1.4 times greater than short selling by public. MODERATELY BEARISH	NYSE MEMBERS This group has sold 42 million more shares off the exchange floor than it bought in recent weeks. VERY BEARISH
DIVIDEND YIELD 3%, average yields for Dow Jones industrial average and S&P 500 stocks have both fallen to the level that in 15 years has signaled a market peak. BEARISH	MUTUAL FUND MANAGERS Fund managers are good contrary indicators: They buy stocks aggressively just before bull markets turn south and vice-versa. Managers are turning bearish, raising cash reserves to their highest level since November. BULLISH	MARKET BREADTH Number of advancing and declining stocks has been equal recently, a phenomenon usually seen around market peaks. MODERATELY BEARISH	

DATA: INSTITUTE FOR ECONOMETRIC RESEARCH

day, handling trading in more than 1,500 stocks. To get a reading from specialists, technicians compare how much stock they are selling short vs. the public's short sales. Short-sellers, who bet that stock prices will drop, sell borrowed stock, planning to repay the loan with stock bought after the price slumps. Analysts take note whenever specialists' short sales exceed the public's. With specialists now shorting 1.4 times more stock than the investing public, analysts consider that a moderately bearish signal.

■ **Insiders' transactions:** Specialists may know the trading floor, but nobody knows individual stocks like the executives and directors running the companies. So another good barometer is what they're doing. According to technicians, insiders were selling heavily during March and April, but began buying again in May. Although this indicator is giving off mixed signals, it could be a sign of a coming rally.

■ **Trading patterns:** Some technicians, known as "tape watchers," insist it's important to look beyond stock prices to indicators that track trading volume and patterns—the crosscurrent beneath the surface that could augur tide changes. One closely watched indicator is the "advance/decline" ratio,

which compares how many stocks rose and fell in a given day or week. This information gives analysts a sense of whether a rally is losing steam or is in its infancy. Alan Hadhazy, senior analyst for the Institute for Econometric Research, says it often takes the market time to gain momentum and "the fuel for

back up to 15.4%, but the number of advances and declines has recently been equal, suggesting a market top.

■ **Federal Reserve:** One thing that causes technicians to throw their p-e and volume charts out the window is any move by the Federal Reserve to tinker with monetary poli-

uniformly ease or tighten credit sets off a signal. back calls three bouts of tightening "three steps a stumble," since the market almost always falls a ward. Two consecutive easings—known as "two blues and a jump"—have historically produced an average 31% rise in stocks a later.

Fosback swears by this tem, and with good reason. Had an investor bought each of the 19 tumble since 1914, and sold a year later, \$10,000 invested in the 500 would now be worth more than \$870,000—far better than buy-and-hold.

Despite Leibovitch's bearishness, the Fed's accommodative posture is leading many technicians to ignore the longer-term signals right now. They're betting that government's willingness to ease credit will enable stocks to climb higher by the end of the year. That's because Wall Street believes the Fed will continue stoking the economy to ensure that President Bush wins reelection. In fact, since 1920, the S&P has risen an average 11% between June and Election Day in Presidential election years.

What happens after the election? Some technicians feel a correction is inevitable. Will it be right? Only market time will tell.

Dean Foster

A RECOMMENDED READING LIST

BOOKS

STOCK MARKET LOGIC, by Norman Fosback (\$40; Dearborn)

TECHNICAL ANALYSIS OF STOCK TRENDS, by Robert D. Edwards & John Magee (\$60; John Magee Inc.)

TIMING THE MARKET, by Weiss Research (\$23; Probus)

WINNING ON WALL STREET, by Martin Zweig (\$20; Warner)

NEWSLETTERS

BOB NUROCK'S ADVISORY 215 296-2411 (\$247/yr.)

MARKET LOGIC 800 327-6720 (\$95/yr.)

ZWEIG FORECAST 516 785-1300 (\$265/yr.)

DATA: HULBERT FINANCIAL DIGEST; BW

any price move is always volume."

A common calculation is to subtract the number of declining stocks from the number of advancing stocks, then divide by the number of total issues traded. When averaged over 10 weeks, analysts have found the norm to be 25%, with anything above 40% bullish and below 15% bearish. Since February, this indicator has dipped below 13%. It's

cy. Many analysts believe it's the credit supply that governs the economy and the markets. "If there's anything you learn, it's to go with the Fed," says Martin Zweig, editor of *The Zweig Forecast*.

Technicians have devised a simple timing system that is triggered by a series of Fed actions. Any successive moves to change stock margins, the discount rate, or bank reserve requirements in ways that

HITCHING YOUR PORTFOLIO TO THE STARS

Can you predict the stock market by studying the growth patterns of tree rings? Might heavy sunspot activity portend a rise in the Dow to 4,000? Some technical analysts think so.

Such "cycle scientists" believe that many phenomena in nature and society occur in common fixed intervals. Sunspots, for instance, tend to appear in 11-year cycles. By comparing nature's patterns

with historic market performance, these analysts predict trends in cycles ranging from hours to centuries. Among the approaches:

■ **Kondratieff cycle:** Named for a Russian economist, this theory holds that economies cycle every 48 to 60 years. By this standard, real growth in U.S. gross national product peaked in 1973 and has been on a downtrend ever since.

■ **Elliott Wave theory:** This revolves around the unusual propensity of the Fibonacci number series to persist within nature. (The series consists of numbers equal to the sum of the two preceding numbers: 1-2-3-5-8-13...) Elliott Wave disciples believe stock prices



move in predictable ways consistent with the Fibonacci series. Newsletter publisher Robert Prechter used it to predict twists and turns of the 1980s bull market. Now he sees the end to a "grand supercycle rise dating from 1784" that could send the stock market plunging 90% to 98% within 12 years.

■ **Planetary cycles:** Some technicians believe market trends can be divined from astrology, which is a study of time and cycles of the stars and the planets. As for the 1987 market crash, some proponents claim to have predicted it based on the celestial positionings of Saturn, Jupiter, and Uranus.

D.

Canon introduces the CJ10 color copier, printer, scanner.



Now the power of color is yours.

With the CJ10 on your desk top, you can make remarkably high-quality full-color copies and overhead transparencies.

In fact, CJ10 copies have virtually the same picture-like clarity and crisp, black text as copies made by Canon's renowned Color Laser Copiers. And, with a simple option, the CJ10 connects to your computer so you can scan and print in high-quality color too.

The complete CJ10 desktop full-color system lets you create such effective color documents that it could be the most powerful business tool ever put on a desk top.

It's easy to use, easy to maintain, and priced so that it's easy to afford. With a CJ10, the power to improve your image is finally within your reach.

For more information, simply call 1-800-OK-CANON.

CJ10
COLOR BUBBLE-JET COPIER



Canon

Home

COLOR THIS PAINT GREEN

Most do-it-yourselfers find that slapping a fresh coat of paint on a drab room is an easy way to give the place a breath of fresh air. Now, along with the cosmetic rewards, a new kind of latex paint can actually help keep the air itself fresh.

The product contains none of the mineral spirits or other petroleum-based solvents or thinners used in almost all paints. So it's odor-free and does not emit harmful fumes. Such vapors can combine with other atmospheric gases to produce low-level ozone, a major component of smog. Some solvent-free paints have been marketed to environmentally aware customers in Germany and other European countries for several years. Now Glidden, based in Cleveland, is the first to offer one in the U.S.

Stores began stocking its Spred 2000 brand in May.

Executives at such competitors as Benjamin Moore, Pratt & Lambert, and Sherwin-Williams are considering whether to offer comparable nonsolvent paints. But they note that standard interior latex paints contain only 2% to 7% of the harmful solvents known as volatile organic compounds (VOCs). In contrast, the typical oil-based paints recommended for exterior use or high-traffic areas average 40% or 50%.

SAFE LEVEL. "There's a big reduction in VOCs if you use a gallon of latex paint instead of an oil-base product," says a Sherwin-Williams spokesman. "But the environmental effect is minimal when you talk about going down to 0% from just 4%, which is the level in the majority of our products." What is more, adds a Benjamin Moore executive,



came up with VOC-free technology. Glidden is using a product is a waterborne polymer gets mixed with coloring pigment the resin that makes the mixture stick to a surface. When water evaporates, the polymer particles fuse together to form a smooth coating on the wall. Marketing Manager Andreas Rasmacher says the material is being made available to other paint companies.

In general, paints with lower VOC counts dry more slowly, go on smoothly, and are not as durable as others. But Glid-

den claims the new polymer technology lets Spred 2000 fit measure up to conventional paints. So even though a gallon costs \$1 or \$2 more, customers concerned about air they breathe won't think they're paying through the nose.

Still, every little bit helps. So Rohm & Haas, which supplies solvents to the industry,

claims the new polymer technology lets Spred 2000 fit measure up to conventional paints. So even though a gallon costs \$1 or \$2 more, customers concerned about air they breathe won't think they're paying through the nose.

Don De

Insurance

SIMPLIFIED POLICIES FOR PLUGGING MEDICARE'S GAPS

Finally, there's something to crow about in health care. By the end of July, insurers will be required by law to offer standardized medigap policies to supplement Medicare for those over 65.

Medigap policies plug the holes in benefits paid to the elderly by Medicare. Until now, there was such a bewildering array of choices that confused seniors often wound up buying policies that duplicated each other. "In the past, people couldn't make informed decisions," says Jim Firman, president of United Seniors Health Cooperative, a consumer-information group.

The standardized policy comes in 10 versions, plans A through J, with increasing benefits and price tags. Plan A covers the basics: copayment for hospital bills, full payment for 365

hospital days after Medicare runs out, a 20% copayment on doctors' bills, and three pints of blood.

At the other end of the

spectrum, Plan J covers hospital and doctor deductibles, nursing-home copayments, at-home recovery, foreign-travel emergency care, and 50% of prescription-drug costs up to \$3,000 a year. Prices vary from \$350 to \$900 a year for Plan A to \$1,200 to \$3,800 for J. Such ranges should narrow. Since price is the only variable, consumers should gravitate to the cheapest plans.

NO RUSH. A big plus of this overhaul is that insurers must offer a six-month open-enrollment period during which seniors can sign on regardless of their health.

The period starts when you sign up for Medicare part A, which covers doctors' bills. Most people get part A, covering hospitalization, at 65 and part B whenever they retire.

Some benefits add little advantage, such as one that pays the \$100 deductible for physician services and another that pays \$120 for preventive screening. You'll spend as much in premiums for these as they pay out. (For details, send a self-addressed business-size envelope with 52¢ postage to United Seniors Health Cooperative, 1331 Street N.W., Suite 500, Washington D.C. 20005-4706.)

Don't rush to drop your current medigap plan. Retired government workers in particular may get better benefits from their former employer than from a standardized policy. But if you're shopping for medigap insurance, you'll finally be able to tell the policies apart.

Pam Bla

FOUR PLANS AT A GLANCE

C Basic benefits, hospital deductible, skilled nursing-home co-payment, foreign travel care, doctor's bill deductible

D Same as C, minus the doctor's bill deductible but adds at-home recovery

G Same as D, but adds coverage for 80% of doctor's charges that go above the allowed Medicare amount

I Same as D, except pays 100% of excess doctor's charges and 50% of prescriptions up to \$1,250

DATA. UNITED SENIORS HEALTH COOPERATIVE

HI-TEC POSTERS FOR PARKS
FIRST EDITION

THE FUTURE OF OUR NATIONAL PARKS IS IN YOUR HANDS



Your purchase of our First Edition National Parks Commemorative Poster will provide funds for projects in our National Parks, Monuments and Historic Sites. All net proceeds will go directly to these projects via the National Parks And Conservation Association, a nonprofit citizen group committed to the preservation of America's natural and cultural heritage. For only \$6.90 you'll receive a beautifully illustrated 19 x 33 inch poster featuring the flora, fauna and geographical landmarks from dozens of National Parks and Monuments. It's suitable for framing and makes an excellent educational tool. This is your chance to help our National Parks and to enjoy their unique beauty on your wall.



OUR NATIONAL PARKS

The present is our Heritage. Preserving Our Future.

The Posters
For Parks Series
is sponsored by
Hi-Tec Sports



To order your poster send a check or money order (do not send cash) in the amount of \$6.90 per poster made payable to: National Parks Poster Offer PO Box 6010 Westbury NY 11592-6010

Please Print Clearly

Number Of Posters Ordered _____ Amount Enclosed _____

Name _____

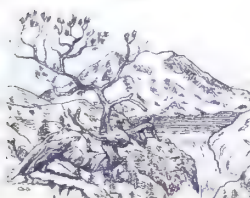
Address _____ Apt No. _____

City _____ State _____ Zip _____

Allow 8 weeks for shipment. Offer valid only in U.S.A. Orders must be received by 12/31/92

Space for this
ad was made
available by:

BusinessWeek



Travel

FLY AWAY— AND LEAVE THE JET LAG BEHIND

For people who hop continents regularly, especially business travelers, jet lag goes with the territory. The symptoms—insomnia, fatigue, stomach trouble, aching muscles, and general malaise—are not unlike those of a hangover. And as with hangovers, everyone and his sister has a cure.

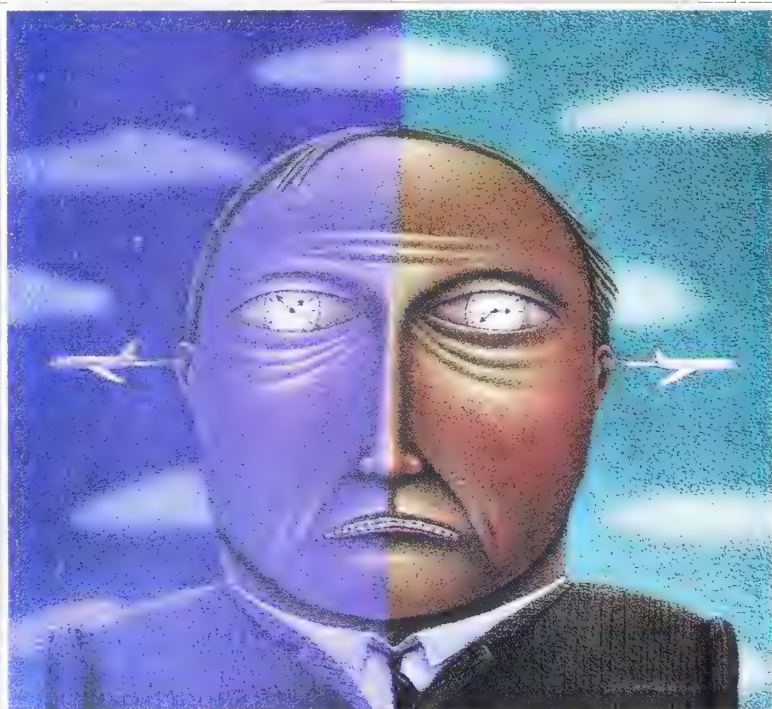
Some people swear by special diets. Others use computer programs that custom-design eating and sleeping regimens for their trip. Pragmatic types opt for the “when in Rome” philosophy, and they shift their schedules to the local time immediately upon arrival at their destination. Others, including many scientists, believe the secret lies in sunlight. But for many people, the solution is often a patchwork of remedies.

Frequent Flyer magazine publisher Martin Deutsch, who has been flying for 36 years, says he can’t be bothered with unproven theories that make you “eat your mother-in-law’s socks.” Although he has yet to discover a fail-safe solution, he does employ his own collection of tricks in transit. They include eating light on planes, napping en route, hiding his watch in his pocket, and drinking no alcohol—so as to avoid dehydration.

CATCHING UP. Jet lag is a very real physiological phenomenon. Scientists attribute its symptoms to a shift in what are known as circadian rhythms—daily cycles of wakefulness and sleep—that regulate hormones and body temperature. For every time zone you cross, it takes one day, as a rule, to adjust your body clock. But the adjustment varies. Older people suffer more. Some lucky people

never get jet-lagged. And people do better flying west than east, since the body finds it easier to set its clock back than ahead.

The key to preventing jet lag lies in zeitgebers (time-givers)—signals that send the body cues about what time of day it is. Light is the most



important, but zeitgebers also include food, drugs, exercise, and social cues. That’s why it’s easier to stay awake at a lively party than in your hotel room watching TV.

Jet-lag diets use food as zeitgebers to ease the body into new time zones. The best-known diet is described in

Overcoming Jet Lag (\$5.95, Berkley) by Charles F. Ehret, a scientist who studied jet lag while at the Energy Dept.’s Argonne National Laboratory. The diet calls for alternating light meals with fasting, starting several days before takeoff. On travel day, you eat little—less than 1,000 calories. On the plane, eat nothing and try to nap—until breakfast time at your destination. Then, eat a high-protein breakfast. Dinner should be high in carbohydrates, which facilitate sleep. But food alone isn’t enough. Ehret sug-

gests ways to regulate caffeine consumption and social activity, too.

LIGHT TOUCH. Jet-Ready President Bill Ashton claims that if his program is followed carefully, travelers arrive at their destinations most fully adjusted to new time. Jason Carlson, engineer in Redwood City, Calif., says he flew to Geneva on business in February, arriving on a Sunday. He would have plenty of time to adjust. But having followed Jet-Ready’s prescription rigorously, Carlson felt so comfortable upon landing that he drove to the Olympic Games in Albertville, France, came back the evening, and still felt fine. On another trip, a three-week vacation in New Zealand and Fiji, Carlson says he adjusted immediately, with only minor sleeping problems.

Sunlight is the most important zeitgeber, though, and for now, the best advice is to spend as much time as possible outdoors when you arrive at your destination. But there may soon be more scientific ways of using light to overcome jet lag.

Based on research done at Harvard University’s Charles Czeisler, Light Sciences Inc. in Braintree, Mass., has developed a prototype of a visor to be worn by airline passengers. The device would emit light signals in patterns designed to shift the circadian clock faster. Light Sciences says that a traveler who uses the device for several days before a trip could be entirely adjusted to a new time zone by arrival. It will probably hit the market two or three years before the new technology is available commercially. Of course, the visor shifts your clock too quickly, you could end up with jet lag before you leave home.

Andrea Rothman

HOW TO MINIMIZE THE PAIN

- ▶ Eat lightly on travel days and avoid alcohol
- ▶ Drink plenty of water to avoid dehydration
- ▶ Switch to local eating and sleeping schedules at once
- ▶ Get maximum exposure to sunlight at new destination
- ▶ Use sleeping pills judiciously; seek medical counsel first

On Wings of Glory...

*sailing ships the size of dinosaurs
will gather in New York Harbor
...and make us feel small
and young again.*



On July 4, 1992, the greatest assemblage of Tall Ships in modern history will celebrate Columbus' arrival in the Americas 500 years ago. More vessels from more countries than ever before have already accepted our President's invitation to participate in this international display of maritime unity. *Operation Sail 1992* and a few sponsors will put on a Fourth of July celebration that will be watched by millions of viewers around the world.

For sponsor information about *Operation Sail 1992* events, please call
OPERATION SAIL 1992

2 WORLD TRADE CENTER, NEW YORK, NY 10048,
(212) 912-1234

Photo: B. Mendlowitz



BRAVO!

Lincoln Center applauds Consolidated Corporate Fund Supporters

1991-92 Lincoln Center Consolidated Corporate Fund Leadership Committee

Committee Chairman

Richard S. Braddock, President
Citibank, N.A.

Paul A. Allaire, Chairman
Xerox Corporation

Janichi Amano, President
Mitsui & Co. (U.S.A.), Inc.

Charles B. Benenson, President
Benenson Capital Company

Frank A. Bennack, Jr., President
The Hearst Corporation

Theodore H. Black, Chairman
Ingersoll-Rand Company

Daniel B. Burke, President
Capital Cities ABC, Inc.

Willard C. Butcher, Former Chairman
of the Board

The Chase Manhattan Bank, N.A.

Robert A. Cohen, Executive Vice President
and General Manager
Credit Lyonnais

D. Ronald Daniel, Director
McKinsey & Company, Inc.

Martin S. Davis, Chairman
Paramount Communications Inc.

William C. Ferguson, Chairman
NYNEX Corporation

Eduard S. Finkelstein, Chairman
R.H. Macy & Co., Inc.

Richard V. Giordano, Chairman
The BOC Group, Inc.

Maurice R. Greenberg, Chairman
American International Group, Inc.

H. John Greeniaus, President
Nabisco Brands, Inc.

Alberto Ithurgun, Senior Vice President
New York Newsday

Melt in Jacobs, Chairman
Saks & Company

John E. Klein, President
Banque Corporation

Erich Krampe, President
Mercedes-Benz of North America, Inc.

Jon C. Madonna, Chairman
KPMG Peat Marwick

Peter L. Malkin, Senior Partner
Wien, Malkin & Botes

John P. Mascotte, Chairman
The Continental Corporation

Edmund T. Pratt, Jr., Chairman
Pfizer Inc.

James J. Schiro, Vice Chairman,
Metropolitan Region

Price Waterhouse

Walter V. Shipley, Chairman
Chemical Banking Corporation

Carl Spielvogel, Chairman
Backer Spielvogel Bates Worldwide, Inc.

Thomas W. Strauss

Frank J. Taseo, Chairman
Marsh & McLennan Companies, Inc.

Martin S. Traub, Chairman
Bloomingdale's

Phyllis Weiskopf, Executive Vice President
North America

Union Bank of Switzerland

U.S. Trust

George Weissman, Chairman
Lincoln Center, Inc.

Nathan Weinstock, President
Lincoln Center, Inc.

Outstanding Leadership \$150,000 and more

Bristol Myers Squibb Company
Philip Morris Companies Inc.
Kraft General Foods
Miller Brewing Company
Real Estate and Construction Council
The Starr Foundation

Grand Leadership \$100,000 and more

Capital Cities/ABC, Inc.
The Chase Manhattan Bank, N.A.
Chemical Banking Corporation
CITIBANK
Consolidated Edison Company of
New York, Inc.
William Randolph Hearst Foundation
IBM Corporation
J.P. Morgan & Co. Incorporated
New York Telephone Company
NYNEX Foundation
The New York Times Company
Foundation, Inc.
Paramount Communications Inc.

Distinguished Leadership \$75,000 and more

CBIS Inc.
Drexel Burnham Lambert Foundation
Manufacturers Hanover Trust

Leadership \$50,000 and more

American Express Company
The Continental Corporation
Foundation
Merrill Lynch & Co. Foundation, Inc.
Metropolitan Life Foundation
The Pfizer Foundation
RJR Nabisco
The Rockefeller Group

Pacesetters \$25,000 and more

Allied Signal Inc.
American Home Products Corporation
Arthur Andersen & Co.
AT&T Foundation
Bankers Trust Foundation
The BRT Group, Inc.
Leo Burnett Company, Inc.
The Coca-Cola Company
Deloitte & Touche
The First Boston Foundation Trust
General Electric Company
General Motors Foundation
GTE Foundation
Hess Foundation, Inc.
Hoechst Celanese Corporation
ITT Corporation

Kohlberg Kravis Roberts & Co.
KPMG Peat Marwick
Macy's
Marsh & McLennan Companies, Inc.
McGraw-Hill Foundation, Inc.
Mitsui & Co. (U.S.A.), Inc.
Mobil Foundation, Inc.
Morgan Stanley & Co., Incorporated
New York Life Foundation
Price Waterhouse
The Prudential Foundation
Reliance Group Holdings, Inc.
Revlon
Ruane, Cunniff & Co., Inc.
Saks Fifth Avenue
The Salomon Foundation
Joseph E. Seagram & Sons, Inc.
Sterling Drug Inc.
Texaco Inc.
Time Warner Inc.
Times Mirror Company
Xerox Corporation

Patrons \$10,000 and more

AGVAR CHEMICALS INC.
American Cyanamid Company
American Re-Insurance Company
The Annenberg Foundation
Atlantic Richfield Company
Avnet, Inc.
Backer Spielvogel Bates Worldwide
The Bank of New York
Barclays Bank
Black Drug Company Inc.
Booz Allen & Hamilton Inc.
Broadcast Music, Inc.
Brown & Wood
Bunge Corporation
Carter-Wallace, Inc.
Champion International Corporation
The Chubb Corporation Charitable Trust
CIBA-GEIGY Corporation
Cleary, Gottlieb, Steen & Hamilton
Cline, Davis & Mann, Inc.
Colter Industries Inc.
Coopers & Lybrand
Credit Lyonnais
Credit Suisse
Dean Witter Reynolds Inc.
The Dun & Bradstreet Corporation
Ernst & Young
Forbes Inc.
General Reinsurance Corporation
Georgia-Pacific Corporation
Goldman, Sachs & Co.
Grand Metropolitan Inc.
L. Jay Grossman, Jr. Foundation Inc.
Guardian Life Insurance Company of
America
Hoffmann La Roche Inc.
Richard H. Holzer Memorial Foundation
Home Life Insurance Company
Ingersoll Rand Company
Johnson & Higgins
Johnson & Johnson
Kimberly Clark Corporation
Kyotaro Co., Ltd.
Lazard Freres & Co.
Lehrer McGovern Bovis, Inc.
Thomas J. Lipton Foundation, Inc.
Lord Day & Lord, Barrett Smith

Marine Midland Bank
Matsushita Electric Corporation of
America
McAnn-Erickson Worldwide
McKinsey & Company, Inc.
Mercedes-Benz of North America
Merck & Co., Inc.
Milbank, Tweed, Hadley & McCloy
Belle and Murray Nathan Philanthropic
Fund
National Westminster Bank USA
The New York Stock Exchange Foundation
Newsweek, Inc.
North American Philips Corporation
Overseas Shipholding Group, Inc.
Evelyn Paige, Inc.
PaineWebber Group Inc.
Procter & Gamble Fund
Quantum Chemical Corporation
Restaurant Associates Corporation
Rockwell International
Saatchi & Saatchi DFS Compton, Inc.
Schering-Plough Foundation, Inc.
Martin E. Segal Company
Simpson Thacher & Bartlett
Sony Corporation of America Foundation
Swiss Bank Corporation
SYMS Clothing
Thacher Proffitt & Wood
J. Walter Thompson Company
Unilever United States, Inc.
Union Bank of Switzerland
Union Carbide Corporation
Union Pacific Foundation
U.S. Trust Company of New York
E.M. Warburg, Pincus & Co., Inc.
The Warner-Lambert Foundation
Weil, Gotshal & Manges
Wells, Rich, Greene, Inc.
Wertheim Schroeder & Co., Incorporated
Westinghouse Broadcasting Company
Wien, Malkin & Botes

Friends \$5,000 and more

ABD Securities Corporation
ABN-AMRO Bank N.Y.
ADP Foundation
AJ Contracting Company, Inc.
A.L. Laboratories, Inc.
Adia International S.A.
Alusuisse-Lonza America Inc.
Amex Foundation, Inc.
American Stock Exchange, Inc.
Arnold & S. Bleichroeder, Inc.
Banca Commerciale Italiana
Benenson Capital Company
Blackstone Financial Management
The Blackstone Group
Carol Management Corporation
Chesbrough Pond's USA
The Chevron Companies
Christ Day Mojo
Chrysler Corporation
The Coach Dairy Goat Farm
Colgate-Palmolive Company
The Cowles Charitable Trust
Cushman & Wakefield, Inc.
D'Arcy Masius Benton & Bowles, Inc.
Debevoise & Plimpton
R.R. Donnelley & Sons Company
E.I. du Pont de Nemours & Company
Edison Parking Corporation
FCB Leber Katz Partners
The Fisher Brothers Foundation
Ford Motor Company
Fulbright & Jaworski

The Georgetown Group
The BFGoodrich Company
Mark Goodson
Grant Thornton
Gray Advertising Inc.
Grumman Corporation
Grus & Co.
Hallmark Corporate Foundation
The Henley Group, Inc.
The George Hyman Construction Company
International Flavors & Fragrances Inc.
International Paper Company Foundation
Jaros, Baum & Bolles
H.J. Kalikow & Co., Inc.
Florence and Robert Kaufman
Kekst and Company Incorporated
Kellogg Company
Kiddier, Peabody & Co. Incorporated
The Calvin Klein Foundation
Koepfeler Tene Rignardi, Inc.
The Leslie Fay Companies, Inc.
Loews Corporation
Lowe & Partners
Leon Lowenstein Foundation
The Macklowe Organization
Mr. and Mrs. Peter L. Malkin
The May Department Stores Company
MCA Universal
The Donald C. McGraw Foundation
Medco Containment Services, Inc.
Mehville Corporation
William M. Mercer, Incorporated
Metallgesellschaft Corp.
Miliken & Company
Neuberger & Berman
Newmark and Company Real Estate, Inc.
Ogden Corporation
Ogilvy & Mather Worldwide
Park Summit Realty Corp.
Phelps Dodge Corporation
Polo Ralph Lauren Corporation
Proskauer Rose Goetz & Mendelsohn
Ragu Foods Co.
Republic National Bank of New York
Revillon Incorporated
The Riese Organization
Sanwa Business Credit Corporation
Sara Lee Corporation
Peter Sharp & Co., Inc.
Sharp Electronics Corporation
Shimizu Corporation
Siemens Corporation
Silverstein Properties, Inc.
The Solow Foundation
Sony Music Entertainment Inc.
Edward Sulzberger Foundation, Inc.
Swig, Weiler & Arnoff Mgt. Co. Inc.
Toshiba America, Inc.
Toyota Motor Corporation
The Donald J. Trump Foundation, Inc.
Universal Leaf Tobacco Co., Inc.
U.S. Trust, Inc.
Viacom International Inc.
Westvaco Corporation
Young & Rubicam Inc.

and 172 contributors under \$5000

Your company can play a role at Lincoln Center by joining the Consolidated Corporate Fund which benefits all of Lincoln Center's ten performing arts companies. For information call George Weissman, Chairman of Lincoln Center, at 875-5000. A copy of the last annual report may be obtained upon request by writing to: N.Y. State Department of State, Office of Charities Registration, Albany, N.Y. 12231 or Lincoln Center for the Performing Arts, Inc., 70 Lincoln Center Plaza, New York, N.Y. 10023



Lincoln Center for the Performing Arts

The Metropolitan Opera • New York Philharmonic • The Juilliard School • New York City Ballet • New York City Opera • The Film Society of Lincoln Center • The Chamber Music Society of Lincoln Center • Lincoln Center Theater • School of American Ballet • Lincoln Center for the Performing Arts, Inc.

Index to Companies

Index gives the starting page for a story or feature with a significant reference to a company. Most directories are indexed under their own names. Companies listed only in tables are not included.

Laboratories 98	Deutsche Bank Capital Markets 50
Systems 32	Drake Capital Securities 92
ed Micro es 44	Drexel Burnham Lambert 62
stage	Dun & Bradstreet 25, 29
national 42	Du Pont 104
Life & Casualty 96	Duracell 96
Pharma 71	
32	E
an Airlines 37, 74	EDS 134
an Home	Eli Lilly 39
ucts 71	Elizabeth Arden 39
an Re-Insurance 96	Emmis Broadcasting 62
x 37	Environomics 7
Suisse 34	Equifax 39
ser-Busch 14, 37	Evergreen Media 62
Computer 32	
search 32	F
Records 62	Faberge 39
34, 36, 50, 74, 103,	First Boston 55, 98
	First Executive 62
acific Group 82	Fleet/Norstar 96
37	Ford 7, 37, 82, 89, 104, 134
	Form Plastics 37
	Fox 62
22	Frederick's of Hollywood 44
merica 99	Fuji Machine Manufacturing 50
lapoalim 55	Fuji Photo Film 50
f New England 96	
f New York 39	G
f Tokyo 51	Gali Industries 55
6	Gartner Group 74
inada 36	Gateway 54
laboratories 104	GE 104
in Moore 130	Geffen Records 62
(M.) 7	General Electric Capital 54
82	Glidden 130
104	GM 7, 14, 50, 82, 85, 104, 126, 134
llen & Hamilton 34	Granum Communications 96
wine Asset	Green Bay Packers 42
agement 100	Gulfstream 134
Myers 98	
r Industries 32	H
	Hartford Life Insurance 74
ision Industries 96	Healthydyne 100
Klein Cosmetics 39	Herman's Sporting Goods 54
ian Pacific 36	Hertz 37
ICities/ABC 62	Hilton Hotels 92
I Growth	Hoechst 46
agement 44	Hoechst Celanese 46
I Institutional	Home Nutritional Services 100
es 98	Honda 82
82	Hughes 134
2	Hughes Aircraft 44
cal Bank 54	
jo Bulls 42	I
r 7, 82, 89, 134	IBM 32, 44, 50, 74, 103, 104
n Dubilier & Rice 96	Independent Bank 44
44	Industrial Bank of Japan 54
q 32	Infinity Broadcasting 62
ates Investment	Intel 44, 55, 74, 103
ers 100	Intergraph 44
search 74	International Controls 92
y Foods 37	Irvine Sensors 103
ns Engine 34	Isosceles 54
103	
Securities 51	
est 32	
2	
Pistons 42	

ITT 104
J
J. D. Power & Associates 82, 85
Jet-Ready Travel Services 130E2
Johnson & Johnson 71
J. Sainsbury 54
K
Kemper Financial Services 98
Kendall Square Research 74
Kmart 40, 100
Kohlberg Kravis Roberts 54, 62, 96
Kokuyo 32
Koor Industries 55
K-III Communications 96
L
Landor Associates 39
Lehman Brothers 82
LensCrafters 100
Light Sciences 130E2
M
MacIntyre Hudson 7
Macmillan 96
Manpower 25
Mass Mutual 7
Matsushita Electric Industrial 51, 62
Mazda 89
MCA 62
McDonald's 92
McGraw-Hill 30
MCI 36
Merck 98, 104
Mercury Asset Management 54
Microsoft 32, 44
Minolta 32
Mitsubishi 32
Mitsubishi Motors 50
Mitsubishi Petrochemical 50
M. Kimelman 126
MMS International 30
Morgan Grenfell 34
Motorola 104
N
Nakagama & Wallace 25
NationsBank 99
NCR 74
nCube 74
NEC 104
Nissan 7, 51, 82
Nomura Securities 51
O
Oracle 74
Organon 71
Ortho Pharmaceutical 71
P
Pacific Financial 98
Paramount Communications 62
Pep Boys 7
Pfizer 98
Phibro Energy 34
Philip Morris 7
Plexys International 34
Pratt & Lambert 130
Procter & Gamble 100
Prudential Securities 38

Q
Quark 32
R
Random House 40
Rhone-Poulenc 46
RJR Nabisco 96
Rogers Communications 36
Rohm & Haas 130
Royal Bank of Canada 36
S
Salomon 34
Salomon Brothers 25, 34
Sanford C. Bernstein 82, 98
Schering 71
Scholastic 44
Scott Paper 100
Seaman Furniture 96
Sears Roebuck 38, 39
Sharp Electronics 32
Sherwin Williams 130
Simon & Schuster 39
Smaby Group 74
Smith Barney Harris Upham 39, 62
Sony 32, 51
Sotheby's 62
Sprint 36
Standard & Poor's 96
SuperMac Technology 32
Syntex 71
T
Takashimaya 51
Telefonos de Mexico 44
Tesco 54
The Associates 44
Thinking Machines 74
3i 54
Times Books 40
Toshiba 32, 51
Toyota 7, 14, 82, 89
Transco Group 92
Travel One 37
Triangle Industries 92
Tucker Anthony 100
Tyco Toys 44
U
Unilever 39
Unitel Communications 36
Upjohn 98
U.S. Shoe 100
V
Vail Associates 96
Van Dorn Plastic Machinery 50
Vanguard Equity-Income Fund 98
Vympel 34
W
Walden Books 40
Walgreen 40
Wal-Mart 74
Walsh America-PDS 71
Walt Disney 62
Walter Industries 96
Warner Communications 44, 62
Warner-Lambert 71
Warren (S. D.) 100
Wasserstein Perella 54
WasteNet 7
Wellworth (F. A.) 54
Westinghouse 62
Whitegate Investment Counselors 7

Money Making Discovery For Sales Executives!

Imagine finding a hidden universe with thousands of emerging private firms where last year one in seven expanded employment by over 25%, and the 5,000 fastest growing grew by an average of 23% ... creating 502,000 new jobs and the need for almost every kind of business product or service - everything from office equipment to disability insurance to real estate.

A little known sales tool that tracks these companies is making money for sales executives who use it. Called the CORPTECH DIRECTORY, it's the only resource available that uncovers America's emerging sector of technology manufacturers. Think of it! While most of the economy is hurting, these companies are growing. CorpTech gives you their names, geographic location, growth rates for each company, plus names, titles, and responsibilities of their 111,000 key executives.

"Great investment ... made money by quickly and easily identifying customers for specific products," Mike Mueller, Manager, Mitsubishi.

Free fact kit shows 20 money-making ways this sales tool can revitalize your selling efforts. Call 1-800-333-8036 or mail name and address to CorpTech, Dept BSW, 12 Alfred Street, Woburn, MA 01801.

When you give blood you give another birthday, another laugh, another hug, another chance.



American Red Cross

Please give blood.





The Experts Have A Lot To Say About The New Bonneville. At This Rate, They'll Be Speechless.

3.9% APR
48-Month GMAC Financing

\$2,900
Total Savings

Call toll-free 1-800-762-4900 for more product
information and dealer locations.

TV's *MotorWeek* named it their "Driver's Choice" as "America's Best Sedan." *Kiplinger's Personal Finance* called it "Best In Its Class" and "Best New Car," while *Consumers Digest* chose it as a "Best Buy" in its class. And now, the award-winning Pontiac® Bonneville is available with special 3.9% APR/48-month GMAC financing terms that could save you over \$2,900. Yet even with its wealth of negotiating power, Bonneville® is still *thousands* less than the large sedans from BMW and Lexus. It adds up. More car, for less money. At the right time.



Warranty: 3-year/50,000-mile, no deductible warranty (see your dealer for terms of this limited warranty.)

©1992 Pontiac, a Division of Buick Oldsmobile America, Inc. 1992 GM Corp. All Rights Reserved.

Options: 1.5L V-6 engine, 170 hp, 4-speed automatic, 1.5L V-6 engine, 170 hp, 4-speed automatic, 1.5L V-6 engine, 170 hp, 4-speed automatic.

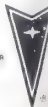
Consumer cost: Finance charges savings of \$2,939.52 based on an average Bonneville amount financed of \$17,664.40 for 48 months at the

average national GMAC APR of 11.32% (January through April, 1992 where customer chose an alternative GM rebate) vs. 3.9% APR with

down payment. Actual savings may vary. This finance rate may not be available with other incentives. See your dealer for details.

GMAC is a service mark of General Motors Corporation. Pontiac is a registered trademark of General Motors Corporation.

PONTIAC
A Higher Level Of Excitement

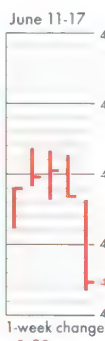
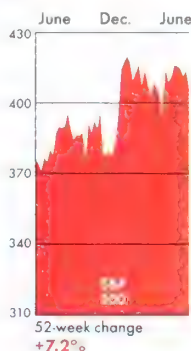


Investment Figures of the Week

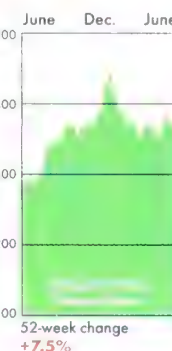
MARKET COMMENTARY

took a pasting this week, as rns over the slow pace of r- and poor corporate earn- continued to mount. The Dow rials tumbled 41 points on 7 to the lowest level in more o months, and the decline ll-company stocks was even ar. Foreign markets were it. Tokyo declined 7.3% for ek to a 68-month low. Mexi- ocks were savaged, with s attributing the decline to is over the improving ele- ances of Ross Perot, who es free trade with Mexico.

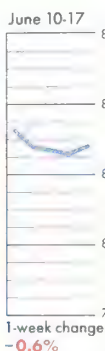
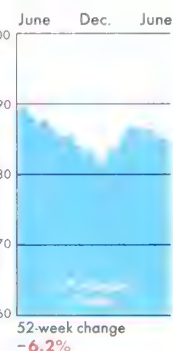
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	% change	
		Week	52-week
STOCKS			
DOW JONES INDUSTRIALS	3287.8	-1.7	11.2
COMPANIES (Russell 1000)	212.3	-1.3	8.3
COMPANIES (Russell 2000)	189.3	-2.9	9.5
COMPANIES (Russell 3000)	226.0	-1.4	8.4
FOREIGN STOCKS			
		% change (local currency)	
		Week	52-week
FTSE 100 (FINANCIAL TIMES 100)	2598.4	-1.8	4.6
NIKKEI INDEX	16,445.8	-7.3	-31.5
TSE COMPOSITE	3368.2	0.0	-4.6

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.69%	3.77%	5.7%
30-YEAR TREASURY BOND YIELD	7.82%	7.90%	8.5%
S&P 500 DIVIDEND YIELD	3.02%	3.00%	3.2%
S&P 500 PRICE/EARNINGS RATIO	24.6	24.9	17.8

TECHNICAL INDICATORS

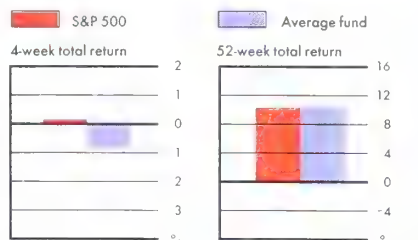
	Latest	Week ago	Reading
S&P 500 26-week moving average	410.9	410.0	Negative
Stocks above 26-week moving average	44.0%	46.8%	Neutral
Speculative sentiment: Put/call ratio	0.52	0.46	Positive
Insider sentiment: Vickers sell/buy ratio	2.00	1.95	Positive

INDUSTRY GROUPS

				BRIDGE INFORMATION SYSTEMS INC			
4-WEEK LEADERS		% change		Strongest stock in group		% change	
		4-week	52-week			4-week	52-week
AUTOMOBILES		10.4	14.4	CHRYSLER		12.2	45.6
AERIALS		8.0	8.6	ASARCO		13.8	10.6
INSURANCE		7.4	24.3	JEFFERSON PILOT		10.4	47.8
S		7.0	55.5	MATTEL		15.2	67.3
EL		6.9	21.0	ARMCO		14.9	28.6
4-WEEK LAGGARDS		% change		Weakest stock in group		% change	
		4-week	52-week			4-week	52-week
MANUFACTURED HOUSING		-17.4	-13.0	FLEETWOOD ENTERPRISES		-21.0	-15.4
HOSPITAL MANAGEMENT		-12.8	-40.3	HUMANA		-19.7	-35.6
SURE TIME		-11.5	5.1	OUTBOARD MARINE		-18.3	15.3
DIVERSIFIED HEALTH CARE		-9.7	-3.9	ABBOTT LABORATORIES		-17.3	5.6
DES		-9.3	21.1	REEBOK INTERNATIONAL		-23.3	-1.1

MUTUAL FUNDS

LEADERS		LAGGARDS	
4-week total return	%	4-week total return	%
S&P 500	7.9	S&P 500	-13.7
LIFETIME GOLD & NATURAL RESOURCES	7.7	STEADMAN OCEANOGRAPHIC TECHNOLOGY	-12.5
SHORE PRECIOUS METALS INDEX PLUS	7.5	LEXINGTON STRATEGIC INVESTMENTS	-7.4
INGTON STRATEGIC SILVER			
52-week total return	%	52-week total return	%
ELITY SELECT SAVINGS & LOAN	50.7	LEXINGTON STRATEGIC INVESTMENTS	-43.4
ELITY SELECT REGIONAL BANKS	49.3	G. T. JAPAN GROWTH	-29.7
EDOM REGIONAL BANK B	46.0	UNITED SERVICES GOLD SHARES	-28.8



RELATIVE PORTFOLIOS

Amounts sent the present of \$10,000 invested one year ago	Treasury bonds	U. S. stocks	Foreign stocks	Money market fund	Gold
Amounts indicate day total returns	\$11,764 +0.51%	\$11,076 -0.42%	\$10,700 -1.35%	\$10,401 +0.06%	\$9,302 +1.24%

on this page are as of market close Wednesday, June 17, 1992, unless otherwise indicated. r groups include S&P 500 companies only; performance and share prices are as of market close

June 16. Mutual fund returns are as of June 12. Relative portfolios are valued as of June 16. A more detailed explanation of this page is available on request

FINDING THE RIGHT MIX OF R&D

There's a simple cure for the sad decline of many U.S. industries: Invent better products, and consumers will beat a path to your door. So, how can companies attain technological leadership? Part of the answer is to invest heavily in research and development. But not just any kind of R&D. For too long, those corporate research labs that concentrated on the "R" churned out important discoveries without turning them into products. In the more recent past, companies have responded to the recession by focusing too much on the "D." That can boost competitiveness in the short term, but it will leave companies unable to come up with the big innovations needed for long-term survival.

The good news is that some U.S. companies seem to be learning from these mistakes. Not only are they raising R&D spending in these difficult times (page 104), they are finding ways to do both R and D—and to speed up the process. If the trend continues, these companies will be producing more innovative products for the same R&D buck.

At the same time, it's also clear that Washington can do more to help. After all, Uncle Sam spends \$74 billion a year on R&D. Yet the vast majority of this money goes for defense and space, areas that no longer spin off many new technologies to the private sector. That's why Washington needs to redirect some of this money to key areas, such as automation, advanced manufacturing, and robotics, that will leverage industry's own R&D. It could also build a technological infrastructure—test facilities and computer networks—companies could use. And it needs to do more in educating industry about the latest science and technology advances around the world. Couple these steps with the improvements in companies' own R&D, and you have a good start toward a national competitiveness policy.

STEP ON IT, DETROIT

As car sales improve in tandem with the U.S. economy, Detroit is starting to score against its Japanese competition (page 82). In the first five months of 1992, U.S. carmakers have grabbed 72.4% of the car and light-truck market, up 1.6 points from a year earlier. Japanese rivals, meanwhile, have lost 1.4 points, to 24%.

Today, Ford and Chrysler are among the world's low-cost producers, many experts contend, and GM finally seems determined to control its expenses. At the same time, costs are rising for the Japanese. Partly in response, Japanese carmakers have hiked sticker prices an average of 5% this spring, and they plan to lengthen the interval between some new models from their current four years. The Big Three lead the Japanese in fuel economy and safety features, both of which are important to U.S. consumers. Detroit is speeding up introductions of new models and is rebounding

from years of being in the design doldrums, while some Japanese design has taken on a bland sameness.

So far, so good for Detroit. But this time, U.S. automakers must not blow their new advantage. If they are to maintain their momentum, they must conquer their instinct for self-immolation. In previous recoveries, they forgot the recession's hard lessons once the going got better. The agency of their cost-cutting efforts disappeared. Profits were frittered away on stock repurchases, fat salaries, and ill-vised diversifications outside the car business. In their last brush with prosperity, GM shelled out \$8.5 billion for computer-services giant EDS and defense contractor Hughes Aerospace, Chrysler paid \$642 million for Gulfstream, and Ford funneled its cash into buying savings and loan associations.

With attention focused on their performance, Detroit's new managements aren't likely to repeat their past mistakes. But the Big Three must realize that their window of opportunity to take back ground from Japan may not stay open for long. Consumers' "buy American" mood may not last, and Japan seems sure to compete more vigorously once election-year threats of U.S. retaliation subside.

There's more riding on a revived Detroit than auto-industry jobs or stockholder and investor interest—though the market has doubled its valuation of the equities of the Big Three in seven short months. It is still true that when Detroit sneezes, the economy catches cold. And a robust Big Three means just the opposite: good economic news for the nation.

INVESTING IN THE CHILDREN

Any politician knows that the family taps our deepest emotions as a haven of intimacy, safety, and comfort. Yet like much in modern society, the U.S. family is changing: About half of all American marriages end in divorce, and out-of-wedlock births have rocketed. The traditional two-parent family is becoming less common. The percentage of children raised by one parent grew from 9.1% in 1960 to 24.7% in 1990. Most children born today may spend at least some time in a single-parent household (page 90).

These are not easy problems to solve. But some policy implications are obvious. First, government should reform those welfare policies that actually encourage family disintegration and dependency. Second, talking about family values, however necessary, will not do much to help the victims of family break-up: the children. That will cost money. Policymakers should focus on helping out parents who work in low-wage jobs, especially single mothers. Low-income parents could get access to better health care and tax credits for child care and housing. The current disincentives against full-time work by welfare recipients should be scrapped. It may be worth investigating ways to automatically deduct child support from the wages of absent fathers.

Compassion and decency are not the only reasons why policymakers should invest in these children. Good education and adequate health care for all young Americans are the best ways to ensure economic growth.

